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AUTHOR	Smith, Lee W.; Buntone, John C.
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ABSTRACT

A final report and compendium of presentation papers and related materials on a management workshop for institutional administrators in optometric and podiatric education is presented. Place and dates of the workshop are listed as are the participants, and the program agenda is provided. A synopsis of the curriculum content of the workshop includes such subjects as governmental relations, managing financial resources, and organization design and decision-making. Workshop evaluation forms for each of the presentations and the overall workshop are included along with a modal profile analysis of each form. Appended are the presentation papers and related materials as follows: "Financial Analysis for Colleges of Optometry and Podiatry" (William Cleverley); "How to Survive Without Federal Funds" (Alvin Morris); "The Eye Institute and the Third Party Market" (Charles Mullen); "Functional Value Analysis--A Technique for Reducing Hospital Overhead Costs" (James Bennett and Jacques Krasny); "Integration of Management Systems and Procedures in Educational Institutions" (F. Olmstead); "Full Cost Tuition and the Academic Common Market" (Spurgeon Bure); "Establishing Performance Standards" (Patricia Carlile and Robert Zimmerman); "Critical Requirements of Performance for Accounting and Budget Personnel;" and an outline of the small group sessions held during the Workshop. (PHR)

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A Management Workshop for Institutional Administrators in Optometric and Podiatric Education

Final Report and Compendium of Presentation Papers and Related Materials

March 16, 1979

Submitted to:

Bureau of Health Manpower
Health Resources Administration
Department of Health, Education and Welfare

Pursuant to:

Contract # HRA-232-78-0125

HE 011 669

Association of Schools and Colleges of Optometry
American Association of Colleges of Podiatric Medicine

This report is made pursuant to Contract HRA 232-78-0125. The amount charged to the Department of Health, Education, and Welfare for the work resulting in this report (inclusive of the amounts so charged for any prior reports submitted under this contract) is $46,849.00. The names of the persons, employed or retained by the contractor, with managerial or professional responsibility for such work, or for the content of the report, are as follows:

- Lee W. Smith, M.P.H., Project Director
- John C. Muntone, Ed.D., Associate Director

Final Report

A Management Workshop for Institutional Administrators in Optometric and Podiatric Education

Conducted By:

Association of Schools and Colleges of Optometry
American Association of Colleges of Podiatric Medicine

Under DHEW Contract HRA #232-78-0125

Submitted: March 16, 1979

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Preface

Under contract (HRA #232-78-0125) to the DHEW/HRA the Association of Schools and Colleges of Optometry and the American Association of Colleges of Podiatric Medicine developed and conducted a "Management Workshop for Institutional Administrators in Optometric and Podiatric Education." The workshop participants represented all five of the colleges of podiatric medicine, fifteen schools and colleges of optometry and representatives of one developing school of optometry.

This final report sets forth the various elements of the workshop including participants, faculty, program agenda, curriculum and summary of participant evaluation of the effort.

Respectfully submitted,

Lee W. Smith, M.P.H.
Executive Director
Association of Schools and
Colleges of Optometry

John C. Muntone, Ed.D.
Executive Director
American Association
of Colleges of Podiatric Medicine

Contractors

Lee W. Smith, Executive Director
Association of Schools and Colleges of Optometry
1730 M Street, N.W., Suite 210
Washington, DC 20036

John C. Muntone, Executive Director
American Association of Colleges of Podiatric Medicine
20 Chevy Chase Circle, N.W., Suite 411
Washington, DC 20014

Workshop

The Management Workshop for Institutional Administrators in Optometric and Podiatric Education was held:

January 31, February 1, 2, 3, at

Stouffer's Pine Isle Hotel
Buford, Georgia

MANAGEMENT WORKSHOP FOR INSTITUTIONAL ADMINISTRATORS

IN OPTOMETRIC AND PODIATRIC EDUCATION

PARTICIPANT ROSTER

Institution	Participant	Title
California College of Podiatric Medicine Box 7855, Rincon Annex San Francisco, Calif. 94120 (415)563-3444	Mr. Richard G. Allen Mr. Homi Jamshed	President V. P. Finance and Administration
Illinois College of Podiatric Medicine 1001 N. Dearborn Street Chicago, Ill 60610 (312)280-2880	Dr. Richard H. Baerg Mr. Thomas H. Ebbers	President V.P. Business Affairs
New York College of Podiatric Medicine 53 East 124th Street New York, NY 10035 (212)427-8400	Mr. William L. Colin	Chief Fiscal Officer
Ohio College of Podiatric Medicine 10515 Carnegie Avenue Cleveland, Ohio 44106 (216)231-3300	Dr. Abe Rubin Mr. David R. Nicolanti* Mr. Walter R. Kilrain	President Controlier Vice President
Pennsylvania College of Podiatric Medicine Race at 8th Street Philadelphia, PA 19107 (215)629-0300	Dr. James E. Bates Mr. Noble J. Rauer	President V.P. for Fiscal Affairs
University of Alabama School of Optometry 1919 Seventh Avenue So. Birmingham, Alabama 35233 (205)934-4488	Mr. Clarence Crump Dr. Dennis Sawyer	Fiscal Officer Director of Clinics
University of California School of Optometry at Berkeley Berkeley, Calif. 94720 (415)642-2153/6547	Dr. Darrell Carter Dr. Merton C. Flom	Assistant Dean Professor
Southern College of Optometry 2001 Associated Road Fullerton, Calif. 92631 (714)870-7226	Mr. Robert A. Baird Dr. Richard L. Hopping	Comptroller President

Management Workshop for Institutional Administrators
in Optometric and Podiatric Education
Participant Roster

Institution	Participant	Title
University of Houston College of Optometry Houston, Texas 77004 (713)749-3363	Dr. Jim Walters Dr. Charles Stewart	Interim Associate Dean Acting Dean
Illinois College of Optometry 3241 S. Michigan Avenue Chicago, Ill 60616 (312)225-1700	Dr. Alfred A. Rosenbloom, Jr.	President
Indiana University School of Optometry Bloomington, Indiana 47401 (812)337-4447	Dr. Gordan Heath	Dean
New England College of Optometry 424 Beacon Street Boston, Mass 02115 (617)261-3430	Mr. Arthur C. Roberts Dr. William R. Baldwin Dr. Dow Smith *	Controller President Consultant
Ferris State College of Optometry Big Rapids, Michigan 49301 (616)796-2641	Dr. Merrill R. Murray Dr. James E. Paramore	Associate Dean Clinic Director, Campus Clinic
State College of Optometry State University of NY 100 East 24th Street New York, NY 10010 (212)477-7995	Dr. Edward R. Johnston Dr. Richard C. Weber	Acting President Clinic Director
Ohio State University College of Optometry 338 West Tenth Avenue Columbus, Ohio 43210 (614)422-2647	Dr. Paulette Schmidt	Clinical Instructor in Optometry
Pacific University College of Optometry 2043 College Way Forest Grove, Oregon 97116 (503)357-6151	Dr. Willard B. Blything Dr. Larry Clausen* Dr. James Peterson	Dean Assistant Dean Director of Clinics
Pennsylvania College of Optometry 1200 W. Godfrey Avenue Philadelphia, PA 19141 (215)424-5900	Dr. Melvin D. Wolfberg Mr. William Wilson Dr. John Crozier*	Acting President V.P. for Finance and Administration Dean of Student Affairs

Management Workshop for Institutional Administrators
in Optometric and Podiatric Education

Institution	Participant	Title
The Eye Institute of the Pennsylvania College of Optometry 1201 W. Spencer Street Philadelphia, PA 19141 (215)276-6070	Dr. Charles F. Mullen*	Executive Director
Southern College of Optometry 1245 Madison Avenue Memphis, Tenn 38104 (901)725-0180	Dr. Spurgeon B. Eure Mr. Claude F. Pullen	President Secretary/Treasurer
University of Missouri at St. Louis 441 Woods Hall 8001 Natural Bridge Road St. Louis, Missouri 63121 (314)453-5252	Dr. Larry Friedman Mr. Robert J. Proffer	Budget Officer
School of Optometry University of Waterloo Waterloo, Ontario, Canada N2L 3G1 (519)885-1211 x3174/3900	Dr. M. E. Woodruff* Dr. R. D. Pellowe*	Director Director of Clinics
School of Optometry University of Montreal C.P. 6128 Montreal, Quebec, Canada H3C 3J7 (514)343-6948	Dr. Claude Beaulne* Dr. Roland Giroux*	Director Clinic Director

*Note: Participation supported by school rather than by contract.

MANAGEMENT WORKSHOP FOR INSTITUTIONAL ADMINISTRATORS
IN OPTOMETRIC AND PODIATRIC EDUCATION

PRESENTER ROSTER

Presenter	Title	Institutional Affiliation
William O. Cleverley, Ph.D.	Associate Professor of Health Services Administration and Accounting	The Ohio State University 1583 Perry Street Columbus, Ohio 43210 (614)422-9708
Alvin L. Morris, D.D.S., Ph.D.	Executive Director	Association for Academ Health Centers 1901 N. Fort Myer Drive Arlington, VA 22209 (703)243-6600
Charles F. Mullen, O.D.	Executive Director	The Eye Institute of the Pennsylvania College of Optometry 1201 W. Spencer Street Philadelphia, PA 1914 (215)276-6070
Jacques Krasny	Senior Project Manager	McKinsey and Company 80 Bloor Street West Toronto, Ontario, Canada M5S 2V1 (416)922-2200
Harold J. Leigh	Deputy Director Budget Priorities	Committee on the Budget U.S. House of Representatives HOB Annex No. 1 Washington, DC 20515 (202)225-8817
Charles Blaschke	President	Education Turnkey Systems Inc. 1030 15th Street, NW Washington, DC 20005 (202)638-3423
Blair Curry	Treasurer	Education Turnkey Systems Inc. 1030 15th Street, NW Washington, DC 20005 (202)638-3423

Management Workshop for Institutional Administrators
in Optometric and Podiatric Education
Presenter Roster

Presenter	Title	Institutional Affiliation
Patricia Carlile	Partner	Leon A. Farley Associates 7315 Wisconsin Avenue Suite 1001E Bethesda, MD 20014 (202)654-9090
Robert Zimmerman	Management Consultant	Management Consultant Services 14417 Bauer Drive Rockville, MD
M.C. Mauney	Executive Director	Vision Education Foundation 11 N. Montgomery Street Memphis, Tenn 38104 (901)726-1171
David R. Nicolanti	Controller	Ohio College of Podiatric Medicine 10515 Carnegie Avenue Cleveland, Ohio 44106 (216)231-3300
Arthur C. Roberts	Controller	New England College of Optometry 424 Beacon Street Boston, Mass 02115 (617)261-3430
Clarence Crump	Fiscal Officer	University of Alabama School of Optometry 1919 Seventh Avenue So. Birmingham, Alabama 3523[illegible] (205)934-4488
Willard B. Bleything, O.D.	Dean	Pacific University College of Optometry 2043 College Way Forest Grove, Oregon 9711[illegible] (503)357-6151
Spurgeon B. Eure, O.D.	President	Southern College of Optometry 1245 Madison Avenue Memphis, Tenn 38104 (901)725-0180

Management Workshop for Institutional Administrators
in Optometric and Podiatric Education
Presenter Roster

Presenter	Title	Institutional Affiliation
Lee W. Smith, M.P.H.	Executive Director	Association of Schools and Colleges of Optometry 1730 M Street, NW Washington, DC. 20036 (202)833-3374
John C. Muntone, Ed.D.	Executive Director	American Association of Colleges of Podiatri Medicine 20 Chevy Chase Circle, NW Washington, DC 20015 (202)537-4950
J. P. Nicolais	Associate Director, Federal/State Programs	American Association of Colleges of Podiatr Medicine 20 Chevy Chase Circle, NW Washington, DC 20015 (202)537-4950
F. L. Olmstead	President	Omega Management Corporation 100 N. Washington Street Suite 240 Falls Church, VA 220 (703)532-5055/9

Management Workshop for Institutional Administrators

In Optometric and Podiatric Education

Detailed Curriculum

Day One: Wednesday

January 31, 1979

Module	Time	Topic	Location	Presenter
1	9:00a.m.-9:15a.m.	Introductory Remarks	Sidney Lanier SE	L. W. Smith J. C. Muntone
	9:15a.m.-11:00a.m.	Financial Analysis	Sidney Lanier SE	W. Cleverley
	11:00a.m.-11:15a.m.	Coffee Break	Sidney Lanier W Foyer	
	11:15a.m.-12:15	Financial Analysis Developmental Workshop	Group A-Rm. 141 Group B-Rm. 143 Group C-Rm. 145 Group D-Rm. 147 Groups A-D	J. C. Muntone F. L. Olmstead L. W. Smith J. P. Nicolais W. Cleverley
	12:15-1:45p.m.	Luncheon	Sidney Lanier W Foyer	
2	1:45p.m.-3:15p.m.	Revenue Generation Techniques	Sidney Lanier SE	Panel: - A. Morris - C. Mullen - M.C. Mauney
	3:15p.m.-3:30p.m.	Coffee Break	Sidney Lanier W Foyer	
3	3:30p.m.-5:00p.m.	Financing/Financial Data Needs	Sidney Lanier SE	B. Moore (Cancelled)
	6:30p.m.-7:15p.m.	Reception	Sidney Lanier W Foyer	
	7:15p.m.-8:30p.m.	Dinner	Sidney Lanier W Foyer	

*Note: Participant Registration will take place on Tuesday, January 30, 1979 from 6:30p.m.-9:30p.m. in main lobby.

Day Two: Thursday

February 1, 1979

Module	Time	Topic	Location	Presenter
4	8:00a.m.-9:30a.m.	Functional Value Analysis (ZBB)	Sidney Lanier SE	J. Krasny
	9:30a.m.-9:45a.m.	Coffee Break	Sidney Lanier W Foyer	
	9:45a.m.-11:15am.	Functional Value Analysis Developmental Workshop	Group A-Rm. 141 Group B-Rm. 143 Group C-Rm. 145 Group D-Rm. 147 Groups A-D	J.C. Huntone F. L. Olmstead L. W. Smith J. P. Nicolais J. Krasny
	11:15a.m.-11:30a.m.	Coffee Break	Corridor-Rooms 141-147	
	11:30a.m.-1:00p.m.	Financial Procedures	Sidney Lanier SE Group A-Rm. 141 Group B-Rm. 143 Group C-Rm. 145 Group D-Rm. 147	Panel Discussion D. Nicolanti A. Roberts C. Crump W. Bleything
	1:00p.m.-2:15p.m.	Luncheon	Sidney Lanier W Foyer	
	2:15p.m.-7:00p.m.	Unstructured Time		
	7:00p.m.-8:30p.m.	Dinner	Sidney Lanier W Foyer	
5.	8:30p.m.-10:00p.m.	Federal Policy Perspective	Sidney Lanier W Foyer	H. J. Leigh

Day Three: Friday

February 2, 1979

Module	Time	Topic	Location	Presenter
6	9:00a.m.-10:30a.m.	Integration of Planning, Organization Budgeting, and Evaluation in the Educational Institution	Sidney Lanier SE	F. L. Olmstead
	10:30a.m.-10:45a.m.	Coffee Break	Sidney Lanier W Foyer	
	10:45a.m.-12:15	Contracts Developmental Workshop	Sidney Lanier SE Group A-Rm. 141 Group B-Rm. 143 Group C-Rm. 145 Group D-Rm. 147 Groups A-D	S. Eure J. C. Muntone F. L. Olmstead L. W. Smith J. P. Nicolais S. Eure
	12:15-1:45p.m.	Luncheon	Sidney Lanier W Foyer	
7	1:45p.m.-3:15p.m.	Personnel Management/ Legal Implications	Sidney Lanier SE	D. Austern (Cancelled)
	3:15p.m.-3:30p.m.	Coffee Break	Sidney Lanier W Foyer	
8	3:30p.m.-5:00p.m.	Automated Systems for Educational Institutions	Sidney Lanier SE	C. Blaschke B. Curry
	5:00p.m.-6:00p.m.	Reception	Main Lobby	
	6:30p.m.-8:00p.m.	Dinner	Poolside	

Day Four: Saturday

February 3, 1979

Module	Time	Topic	Location	Presenter
9	9:00a.m.-10:30a.m.	Government Relations: "Executive Agency Liaison(Division of Allied Health/BHM/HRA)"	Sidney Lanier SE	L. W. Smith
		"Executive Agency Liaison(Division of Medicine/BHM/HRA)"		J. C. Muntone
		"Legislative Liaison and Analysis"		J. P. Nicolais
		"Congressional Budget System and Implications for the FY80 Budget"		F. L. Olmstead
	10:30a.m.-10:45a.m.	Coffee Break	Sidney Lanier W Foyer	
10	10:45a.m.-12:15	Techniques of Personnel Management	Sidney Lanier SE	Panel: - P. Carlile - B. Zimmerman
	12:15-1:45p.m.	Luncheon	Sidney Lanier W Foyer	
	1:45p.m.-2:30p.m.	Plenary Session-Closing Remarks, Recommendations, Adjournment	Sidney Lanier SE	L. W. Smith J. C. Muntone
	2:30p.m.-2:45p.m.	Coffee Break	Sidney Lanier W Foyer	

Management Workshop for Institutional Administrators

In Optometric and Podiatric Education

Synopsis of Workshop Curriculum Content

The Management Workshop for Institutional Administrators in Optometric and Podiatric Education focused predominantly on financial management, with two of the three-and-one-half days of the program dealing with this topic. The balance of the agenda dealt with the other major management systems and procedures, including personnel, organization, and planning. As will be discerned under the individual topical discussions, a number of presentations involved several basic management areas.

The contractual scope of work identified six subject matter areas which were to be covered in the course of the Workshop. These topics, and the related presentations are discussed below.

Academic Personnel Policy and Administration

This topic was addressed on Saturday, February 3, 1979, in the presentation by Ms. Patricia Carlile and Mr. Robert Zimmerman. This mini-panel covered three major areas of concern:

- Recruitment - How to conduct a job search, including researching the labor market, writing job specifications, interviewing, and applicant selection.
- Personnel Evaluation - Approaches to evaluation, employee counseling, promotion and/or outplacement, and use of rating techniques were discussed.
- Staff Development - This topic keyed on "planned retention" as a strategy to deal with turnover. That is, some turnover of staff was stated to be probably a good idea, provided key personnel (both in place and under development) are retained. Means of improving key personnel retention were discussed.

Control and Planning Systems

This topic was addressed by Mr. F. L. Olmstead in his presentation on integration of management systems and procedures. In particular, this module dealt with procedures for planning organizational objectives through relationships of an MBO-type planning system (per Drucker and Mager) to the organization structure,

and controlling resources and budgets via the planning system. This area was also addressed in terms of data management in the presentation of Messrs. Blaschke and Curry on use of mini-and microprocessors in the educational environment.

Government Relations

Two presentations addressed this area. First, Mr. Harold Leigh, Staff Director of the House Budget Committee addressed the new Congressional Budget System established within the last five years, and examined its likely short-term impacts in terms of altered committee relationships and potential changes in funding patterns.

Next, a panel discussion on government relations was presented by the primary faculty. Specific topics addressed were as follows:

- J. Muntone - The Rationale for Government Relations
- L. Smith - Liaison with Executive-Branch Agencies, and Short-term Policy Developments
- F. Olmstead - The Congressional Budget Process - Techniques and Timetables
- J. Nicolais - Liaison with the Substantive Committees of the Congress.

Managing Financial Resources

Three of the main presentations addressed this topic directly. First, Dr. William Cleverly discussed Financial Analysis and the use of financial ratios as a management tool. His presentation covered all of the currently used accounting ratios, their mean, and their computation. Also. Mr. J. Krasny discussed Functional Value Analysis, a particularly useful cost-containment procedure. Akin to zero-based budgeting, but used for the most part on a one-time basis, FVA is an unusually accurate process for determining unneeded overhead expense. Finally, the financial procedures workshop, led by the participants, dealt with specific approaches to improvement of financial management within the individual Schools and Colleges of Optometry and Podiatry.

Organization Design and Decision Making

The presentation on Integration of Management Systems set forth techniques for relating organization structures to program objectives, budgets, accounting systems, and personnel in order to clarify and focus the decision making process.

As noted earlier, Messrs. Blaschke and Curry dealt with some of the data management aspects of this area in their presentation on the use of mini- and micro-processors. More particularly, their presentation showed the utility and flexibility of the new, quite inexpensive, mini- and micro-processors in all areas of educational computer use:

- Computer assisted instruction
- Computer support for insturctional personnel
- Administrative applications, including financial management.

Financial Resource Development

Two of the presentations of the Workshop focused on this area.

The Revenue Generation panel discussion covered all key sources of funding outside the purview of tuition, such as government funding, grants from foundations, and so forth. The three panelists each discussed the following topics:

- Dr. A. Morris - Government Funding and Trends
- Dr. M. Mauney - Endowment and Foundation Funding
- Dr. C. Mullen - Third-party Payors.

The second presentation in this area was a paper by Dr. Spurgeon Eure, Southern College of Optometry, on full-cost tuition. Dr. Eure's essential point was that government and other non-tuition funding sources tend to be quixotic; therefore the student should be responsible for the full cost of his education, less any offsets (e.g., Federal funds). He then discussed the use of State contracts as a procedure to ease the total burden of the individual student, while working to ensure his "repayment" of the debt so generated through service in the state which financed his education. This appears to be working very well for SCO.

Evaluation

I Introduction

The evaluation forms were distributed to participants at the beginning of the conference and were collected at the end of the last workshop session.

The analysis of the forms was done via a modal profile. This method of analysis was chosen because it was considered more appropriate for use with a discrete function than would a mean profile.

The modal profiles were developed by tabulating the responses of the individual participants and then assigning to that session or segment thereof the score value most frequently identified by the participants. Thus, if 30 individuals evaluated a session and 15 rated the session as good, a score of "4" would be assigned to that session.

II

In the following pages are the evaluation forms for the overall workshop and for the individual sessions. In addition to modal profiles, a modal average has been calculated and the comments of participants summarized. The goal of the contractors was to achieve a modal mean between 3.25 and 3.75.

A MANAGEMENT WORKSHOP FOR INSTITUTIONAL ADMINISTRATORS
IN OPTOMETRIC AND PODIATRIC MEDICAL EDUCATION

WORKSHOP SUMMARY EVALUATION FORM

CATEGORY DATA

TYPE OF SCHOOL YOU REPRESENT _____
(Optometry/Podiatry; Public/Private)

POSITION _____ DEGREES (O.D., D.P.M., Ph.D., Ed.D.) _____

IDENTIFY WORKSHOP SESSIONS ATTENDED:
DAY 1: _____, DAY 2 (a.m.): _____

DAY 2 (p.m.): _____, DAY 3: _____

SIGNATURE (OPTIONAL) _____

CONFERENCE RATING *Please rate each characteristic of the conference along the 5-point scale illustrated. Darken the "bubble" which most closely approximates your opinion of the characteristic being rated.*

	POOR	FAIR	AVERAGE	GOOD	OUTSTANDING
	1	2	3	4	5
THE TOTAL CONFERENCE	0	0	0	●	0
THE FACULTY	0	0	0	●	0
SUBJECT MATTER:					
DAY 1	0	0	0	●	0
DAY 2	0	0	0	●	0
DAY 3	0	0	●	0	0
DAY 4	0	0	●	0	0
PRESENTATION/TEXT HANDOUTS	0	0	●	0	0
AUDIOVISUALS	0	0	●	0	0
MEETING ROOM PREP	0	0	●	0	0
THE TOTAL FACILITY	0	0	0	●	0
GENERAL ORGANIZATION AND LOGISTICS	0	0	0	●	0

COMMENTS *(Was there anything you particularly liked or disliked?)*

There was general approval of the workshop and faculty. However, the group found the first two days much better organized and pertinent to their needs than the second two days.

There was general satisfaction with the facility but were some complaints about the temperature control in the meeting room.

MODAL MEANS: Total Conference: 3.2; Subject Matter 3.5; Other: 3.4

A MANAGEMENT WORKSHOP FOR INSTITUTIONAL ADMINISTRATORS
IN OPTOMETRIC AND PODIATRIC MEDICAL EDUCATION

CURRICULUM MODULE EVALUATION FORM

1. MODULE IDENTIFICATION

1.1 DAY/DATE: Wednesday, January 31 1.2 TIME 9:15 a.m.

1.3 PRESENTER(S) William Cleverley

1.4 TITLE/TOPIC Financial Analysis

2. TOPIC EVALUATION *(note: please darken the appropriate "bubble" to indicate your rating)*

ITEM	RATING				
	POOR	FAIR	AVERAGE	GOOD	OUTSTANDING
2.1 INTEREST TO YOU	0	0	0	●	0
2.2 RELEVANCE TO YOUR SCHOOL	0	0	0	●	0
2.3 POTENTIAL FOR USE IN YOUR SCHOOL	0	0	●	0	0
2.4 AMOUNT YOU LEARNED	0	0	●	0	0

3. PRESENTER EVALUATION

ITEM	RATING				
	POOR	FAIR	AVERAGE	GOOD	OUTSTANDING
3.1 PRESENTER'S STYLE & ARTICULATION	0	0	0	●	0
3.2 GRASP OF SUBJECT	0	0	0	●	0
3.3 USE OF WORKING MATERIALS (e.g., A/V, Curriculum Materials, etc.)	0	0	●	0	0
3.4 PRESENTER'S IMPACT ON YOU	0	0	0	●	0

4. COMMENTS AND SUGGESTIONS

In general, the participants felt that the subject was of interest but were less confident of its use and the amount they learned.

As for the speaker, the group approved of him but some wanted him to be more familiar with their institutions and others wanted more group discussion.

MODAL MEANS: Total Session 3.6; Topic 3.5; Presenter 3.75

A MANAGEMENT WORKSHOP FOR INSTITUTIONAL ADMINISTRATORS
IN OPTOMETRIC AND PODIATRIC MEDICAL EDUCATION

CURRICULUM MODULE EVALUATION FORM

1. MODULE IDENTIFICATION

1.1 DAY/DATE: Wednesday, January 31 1.2 TIME 1:45 p.m.

1.3 PRESENTER(S) A. Morris, C. Mullen, W. Mauney

1.4 TITLE/TOPIC Revenue Generation Techniques

2. TOPIC EVALUATION *(note: please darken the appropriate "bubble" to indicate your rating)*

ITEM	RATING				
	POOR	FAIR	AVERAGE	GOOD	OUTSTANDING
2.1 INTEREST TO YOU	0	0	0	●	0
2.2 RELEVANCE TO YOUR SCHOOL	0	0	0	●	0
2.3 POTENTIAL FOR USE IN YOUR SCHOOL	0	0	●	0	0
2.4 AMOUNT YOU LEARNED	0	0	●	0	0

3. PRESENTER EVALUATION

ITEM	RATING				
	POOR	FAIR	AVERAGE	GOOD	OUTSTANDING
3.1 PRESENTER'S STYLE & ARTICULATION	0	0	0	●	0
3.2 GRASP OF SUBJECT	0	0	0	●	0
3.3 USE OF WORKING MATERIALS (e.g., A/V, Curriculum Materials, etc.)	0	0	●	0	0
3.4 PRESENTER'S IMPACT ON YOU	0	0	●	0	0

4. COMMENTS AND SUGGESTIONS

There were varying reactions to the panel. Some found the speakers ideas stimulating, others wanted and expected a more practical presentation designed to provide ideas on mechanisms for revenue generation. All felt that the discussion following the presentations was especially productive.

MODAL MEANS: Total Session: 3.5; Topic: 3.5; Presenter: 3.5

A MANAGEMENT WORKSHOP FOR INSTITUTIONAL ADMINISTRATORS
IN OPTOMETRIC AND PODIATRIC MEDICAL EDUCATION

CURRICULUM MODULE EVALUATION FORM

1. MODULE IDENTIFICATION

1.1 DAY/DATE: Thursday, February 1 1.2 TIME 8:00 a.m.

1.3 PRESENTER(S) J. Krasney

1.4 TITLE/TOPIC Functional Value Analysis

2. TOPIC EVALUATION *(note: please darken the appropriate "bubble" to indicate your rating)*

ITEM	RATING				
	POOR	FAIR	AVERAGE	GOOD	OUTSTANDING
2.1 INTEREST TO YOU	0	0	0	●	0
2.2 RELEVANCE TO YOUR SCHOOL	0	0	0	●	0
2.3 POTENTIAL FOR USE IN YOUR SCHOOL	0	0	0	●	0
2.4 AMOUNT YOU LEARNED	0	0	0	●	0

3. PRESENTER EVALUATION

ITEM	RATING				
	POOR	FAIR	AVERAGE	GOOD	OUTSTANDING
3.1 PRESENTER'S STYLE & ARTICULATION	0	0	0	0	●
3.2 GRASP OF SUBJECT	0	0	0	0	●
3.3 USE OF WORKING MATERIALS (e.g., A/V, Curriculum Materials, etc.)	0	0	0	0	●
3.4 PRESENTER'S IMPACT ON YOU	0	0	0	●	0

4. COMMENTS AND SUGGESTIONS

The group responded extremely favorably to the topic and to the speaker. Some however felt that the size of their institution was too small to justify the expenditures needed for the process.

In general, the group wanted more time for workshops.

MODAL MEANS: Total Session: 4.75; Topic: 4.0; Presenter: 4.8

A MANAGEMENT WORKSHOP FOR INSTITUTIONAL ADMINISTRATORS
IN OPTOMETRIC AND PODIATRIC MEDICAL EDUCATION

CURRICULUM MODULE EVALUATION FORM

1. MODULE IDENTIFICATION

1.1 DAY/DATE: Thursday, February 1 1.2 TIME 8:00 p.m.

1.3 PRESENTER(S) B. L. Leigh

1.4 TITLE/TOPIC Federal Policy Perspective

2. TOPIC EVALUATION *(note: please darken the appropriate "bubble" to indicate your rating)*

ITEM	RATING				
	POOR	FAIR	AVERAGE	GOOD	OUTSTANDING
2.1 INTEREST TO YOU	0	0	0	●	0
2.2 RELEVANCE TO YOUR SCHOOL	0	0	0	●	0
2.3 POTENTIAL FOR USE IN YOUR SCHOOL	0	0	0	●	0
2.4 AMOUNT YOU LEARNED	0	0	0	●	0

3. PRESENTER EVALUATION

ITEM	RATING				
	POOR	FAIR	AVERAGE	GOOD	OUTSTANDING
3.1 PRESENTER'S STYLE & ARTICULATION	0	0	0	●	0
3.2 GRASP OF SUBJECT	0	0	0	●	0
3.3 USE OF WORKING MATERIALS (e.g., A/V, Curriculum Materials, etc.)	0	0	●	0	0
3.4 PRESENTER'S IMPACT ON YOU	0	0	0	●	0

4. COMMENTS AND SUGGESTIONS

The audience's reaction was quite favorable. However, some felt that the subject was not practical for them and others wanted a setting other than after-dinner for the conduct of such a session.

MODAL MEANS: Total Session: 3.8; Topic: 4.0; Presenter: 3.75

A MANAGEMENT WORKSHOP FOR INSTITUTIONAL ADMINISTRATORS
IN OPTOMETRIC AND PODIATRIC MEDICAL EDUCATION

CURRICULUM MODULE EVALUATION FORM

1. MODULE IDENTIFICATION

1.1 DAY/DATE: Friday, February 2 1.2 TIME 9:00 a.m.

1.3 PRESENTER(S) F. L. Olmstead

1.4 TITLE/TOPIC Integration of Planning Organization and Budgeting

2. TOPIC EVALUATION *(note: please darken the appropriate "bubble" to indicate your rating)*

ITEM	RATING				
	POOR	FAIR	AVERAGE	GOOD	OUTSTANDING
2.1 INTEREST TO YOU	0	0	0	●	0
2.2 RELEVANCE TO YOUR SCHOOL	0	0	0	●	0
2.3 POTENTIAL FOR USE IN YOUR SCHOOL	0	0	0	●	0
2.4 AMOUNT YOU LEARNED	0	0	●	0	0

3. PRESENTER EVALUATION

ITEM	RATING				
	POOR	FAIR	AVERAGE	GOOD	OUTSTANDING
3.1 PRESENTER'S STYLE & ARTICULATION	0	0	0	●	0
3.2 GRASP OF SUBJECT	0	0	0	●	0
3.3 USE OF WORKING MATERIALS (e.g., A/V, Curriculum Materials, etc.)	0	0	●	0	0
3.4 PRESENTER'S IMPACT ON YOU	0	0	●	0	0

4. COMMENTS AND SUGGESTIONS

The audience found the presentation generally helpful, but suggested that more background was needed by the audience to fully grasp the subject. Others felt that handouts would have greatly facilitated the group's understanding of the topic.

MODAL MEANS: Total Session: 3.6; Topic: 3.75; Presenter: 3.5

A MANAGEMENT WORKSHOP FOR INSTITUTIONAL ADMINISTRATORS
IN OPTOMETRIC AND PODIATRIC MEDICAL EDUCATION

CURRICULUM MODULE EVALUATION FORM

1. MODULE IDENTIFICATION

1.1 DAY/DATE: Friday, February 2 1.2 TIME 11:00 a.m.

1.3 PRESENTER(S) Spurgeon Eure

1.4 TITLE/TOPIC Full Cost Tuition and Student Contracts

2. TOPIC EVALUATION *(note: please darken the appropriate "bubble" to indicate your rating)*

ITEM	RATING				
	POOR	FAIR	AVERAGE	GOOD	OUTSTANDING
2.1 INTEREST TO YOU	0	0	0	0	●
2.2 RELEVANCE TO YOUR SCHOOL	0	0	0	●	0
2.3 POTENTIAL FOR USE IN YOUR SCHOOL	0	0	●	0	0
2.4 AMOUNT YOU LEARNED	0	0	0	0	●

3. PRESENTER EVALUATION

ITEM	RATING				
	POOR	FAIR	AVERAGE	GOOD	OUTSTANDING
3.1 PRESENTER'S STYLE & ARTICULATION	0	0	0	●	
3.2 GRASP OF SUBJECT	0	0	0		●
3.3 USE OF WORKING MATERIALS (e.g., A/V, Curriculum Materials, etc.)	0	0	0	●	0
3.4 PRESENTER'S IMPACT ON YOU	0	0	0	0	●

4. COMMENTS AND SUGGESTIONS

Because of its direct relevance to the institutions involved, this was very well received by the audience. Participants participated very eagerly and asked numerous questions. Many wanted the session to be longer.

MODAL MEANS: Total Session: 3.75; Topic: 4.3; Presenter: 4.5

A MANAGEMENT WORKSHOP FOR INSTITUTIONAL ADMINISTRATORS
IN OPTOMETRIC AND PODIATRIC MEDICAL EDUCATION

CURRICULUM MODULE EVALUATION FORM

1. MODULE IDENTIFICATION

1.1 DAY/DATE: Friday, February 2 1.2 TIME 3:30 p.m.

1.3 PRESENTER(S) C. Blaske and B. Curry

1.4 TITLE/TOPIC Automated Systems for Educational Institutions

2. TOPIC EVALUATION *(note: please darken the appropriate "bubble" to indicate your rating)*

ITEM	RATING				
	POOR	FAIR	AVERAGE	GOOD	OUTSTANDING
2.1 INTEREST TO YOU	0	0	●	0	0
2.2 RELEVANCE TO YOUR SCHOOL	●	0	0	0	0
2.3 POTENTIAL FOR USE IN YOUR SCHOOL	●	0	0	0	0
2.4 AMOUNT YOU LEARNED	●	0	0	0	0

3. PRESENTER EVALUATION

ITEM	RATING				
	POOR	FAIR	AVERAGE	GOOD	OUTSTANDING
3.1 PRESENTER'S STYLE & ARTICULATION	0	0	●	0	0
3.2 GRASP OF SUBJECT	0	0	●	0	0
3.3 USE OF WORKING MATERIALS (e.g., A/V, Curriculum Materials, etc.)	●	0	0	0	0
3.4 PRESENTER'S IMPACT ON YOU	●	0	0	0	0

4. COMMENTS AND SUGGESTIONS

The problem in this presentation was the failure of the speakers to relate their working knowledge of computers to the knowledge and needs of the audience. Many schools in the group are already using computers in a manner far more sophisticated than was presented by the speakers.

MODAL MEANS: Total Session: 1.75; Topic: 1.5; Presenter: 2.0

A MANAGEMENT WORKSHOP FOR INSTITUTIONAL ADMINISTRATORS
IN OPTOMETRIC AND PODIATRIC MEDICAL EDUCATION

CURRICULUM MODULE EVALUATION FORM

1. MODULE IDENTIFICATION

1.1 DAY/DATE: Saturday, February 3 1.2 TIME 8:30 a.m.

1.3 PRESENTER(S) L. Smith, J. Muntone, J. Nicholias, F. Olmstead

1.4 TITLE/TOPIC Government Relations

2. TOPIC EVALUATION *(note: please darken the appropriate "bubble" to indicate your rating)*

ITEM	RATING				
	POOR	FAIR	AVERAGE	GOOD	OUTSTANDING
2.1 INTEREST TO YOU	0	0	0	●	0
2.2 RELEVANCE TO YOUR SCHOOL	0	0	0	●	0
2.3 POTENTIAL FOR USE IN YOUR SCHOOL	0	0	●	0	0
2.4 AMOUNT YOU LEARNED	0	0	●	0	0

3. PRESENTER EVALUATION

ITEM	RATING				
	POOR	FAIR	AVERAGE	GOOD	OUTSTANDING
3.1 PRESENTER'S STYLE & ARTICULATION	0	0	0	●	0
3.2 GRASP OF SUBJECT	0	0	0	●	0
3.3 USE OF WORKING MATERIALS (e.g., A/V, Curriculum Materials, etc.)	0	0	●	0	0
3.4 PRESENTER'S IMPACT ON YOU	0	0	●	0	0

4. COMMENTS AND SUGGESTIONS

The group was dealing with a familiar subject and the participants felt that much of what was presented was too elementary. In addition, some group members felt that they profited from learning more about the legislative and agency activities of the two Associations.

MODAL MEANS: Total Session: 3.5; Topic: 3.5; Presenter: 3.5

A MANAGEMENT WORKSHOP FOR INSTITUTIONAL ADMINISTRATORS
IN OPTOMETRIC AND PODIATRIC MEDICAL EDUCATION

CURRICULUM MODULE EVALUATION FORM

1. MODULE IDENTIFICATION

1.1 DAY/DATE: Saturday, February 3 1.2 TIME 10:00 a.m.

1.3 PRESENTER(S) R. Zimmerman, P. Carlisle

1.4 TITLE/TOPIC Techniques of Personnel Management

2. TOPIC EVALUATION (*note: please darken the appropriate "bubble" to indicate your rating)*

ITEM	RATING				
	POOR	FAIR	AVERAGE	GOOD	OUTSTANDING
2.1 INTEREST TO YOU	0	0	0	●	0
2.2 RELEVANCE TO YOUR SCHOOL	0	0	0	●	0
2.3 POTENTIAL FOR USE IN YOUR SCHOOL	0	0	0	●	0
2.4 AMOUNT YOU LEARNED	0	0	0	●	0

3. PRESENTER EVALUATION

ITEM	RATING				
	POOR	FAIR	AVERAGE	GOOD	OUTSTANDING
3.1 PRESENTER'S STYLE & ARTICULATION	0	0	●	0	0
3.2 GRASP OF SUBJECT	0	0	0	●	0
3.3 USE OF WORKING MATERIALS (e.g., A/V, Curriculum Materials, etc.)	0	0	0	●	0
3.4 PRESENTER'S IMPACT ON YOU	0	0	0	●	0

4. COMMENTS AND SUGGESTIONS

The participants responded favorably to the topic but less favorably to the manner of its presentation. Comments indicated a desire for more relevance to the institutions represented and for greater number and better handouts.

MODAL MEANS: Total Session: 3.8; Topic: 4.0; Presenter: 3.75

Module 1
Presenter: William O. Cleverley, Ph.D.
Wednesday, January 31, 1979

The opening presentation centered on financial ratio analysis, and the need for industry-like standards of financial condition. As a result of this presentation, and others concerned with financial management, the business officers of both Associations have formed task groups to standardize financial reporting and improve financial analysis.

FINANCIAL ANALYSIS
FOR COLLEGES
OF OPTOMETRY AND PODIATRY

PRESENTED BY

WILLIAM O. CLEVERLEY, PH.D.
ASSOCIATE PROFESSOR
OF
HEALTH SERVICES ADMINISTRATION
AND
ACCOUNTING
THE OHIO STATE UNIVERSITY
1583 PERRY STREET
COLUMBUS, OHIO 43210
614 - 422-9708

FINANCIAL RATIO ANALYSIS

1. UTILITY OF FINANCIAL ANALYSIS

   A. USER'S OF FINANCIAL ANALYSIS

      1. CREDITORS

         a. SHORT-TERM

         b. LONG-TERM

      2. MANAGEMENT

         a. PLANNING

         b. CONTROL

      3. BOARD

      4. POLICY AGENCIES

   B. PRIOR STUDIES

      1. GENERAL INDUSTRY

      2. HOSPITAL INDUSTRY

II. SOURCES OF INFORMATION

A. FINANCIAL

B. NON-FINANCIAL

III. FINANCIAL RATIO ANALYSIS

A. CATEGORIES OF RATIOS

1. PROFITABILITY

2. CAPITAL STRUCTURE

3. ACTIVITY

4. LIQUIDITY

B. SOURCES OF STANDARDS

1. PRIOR VALUES

2. INDUSTRY AVERAGES

IV. FINANCIAL REPORTING REQUIREMENTS AND CURRENT DEFICIENCIES

A. FINANCIAL REPORTS REQUIRED

1. BALANCE SHEET
2. REVENUE AND EXPENSES (INCOME)
3. CHANGES IN FINANCIAL POSITION
4. CHANGES IN FUND BALANCE

B. CURRENT DEFICIENCIES

1. COMPLETENESS OF STATEMENTS
2. FUND ACCOUNTING DEFINITION (ENTITY CONCEPT)
3. DEFINITION OF INCOME
4. CATEGORIZATION OF EXPENSES
5. CATEGORIZATION OF REVENUES
6. LIQUIDITY CATEGORIZATION OF ASSETS AND LIABILITIES
7. ACCRUAL ACCOUNTING (DEPRECIATION)

V. PROFITABILITY RATIOS

A. ALTERNATIVE MEASURES

1. CASH FLOW

-CASH FLOW = NET INCOME + DEPRECIATION

-ABC (1977) -

-ABC (1976) -

2. FUNDS POSITION (FP)

-FP = CASH FLOW - CAPITAL INVESTMENT

-CON-EDISON EXPERIENCE

	68	69	Z0	Z1	Z2	Z3
CASH FLOW	209	216	206	220	215	258
-CAPITAL INVESTMENT	234	296	411	494	474	638
FUNDS POSITION	(25)	(80)	(205)	(274)	(259)	(380)

-ABC (1977)

BEG. NET PLANT	9,596,778
-DEPRECIATION	694,188
+CAPITAL INVESTMENT	
END NET PLANT	9,685,484

3. PRICE ADJUSTED DEPRECIATION (PAD)

- NET INCOME REVISED = CASH FLOW - PAD

- AVERAGE AGE OF PLANT (AAP)

- $AAP = \frac{\text{ALLOWANCE FOR DEPRECIATION}}{\text{DEPRECIATION}}$

-ABC (1977): $\frac{1,713,324}{694,188} = 2.47$

- ASSETS ACQUIRED IN MID 1974

  - PRICE ADJUSTED DEPRECIATION

  - $PAD = \text{HISTORICAL DEPRECIATION} \times \frac{\text{PRICE INDEX (YR. END}}{\text{PRICE INDEX (ACQUI}}$

  - ABC (1977): $694,188 \times \frac{144.6}{126.7} = \$792,2$

  - REVISED NET INCOME

    - ABC (1977) = 896,630 - 792;262

      = $104,368

4. INCOME SOURCE

- ALL - 528,642 (1977)
- OPERATING - 202,442 (1977)
- CHANGE IN FUND BALANCE

1. CHANGE IN CURRENT FUND BALANCE

581,032 (1977)

2. CHANGE IN ALL FUND BALANCES

528,642 (1977)

B. PROFITABILITY RATIOS

1. OPERATING MARGIN (OM)

- $OM = \frac{\text{NET OPERATING INCOME}}{\text{TOTAL OPERATING REVENUE}}$

- ABC (1977) $= \frac{202,442}{7,436,750} = .027$

-ABC (1976) $= \frac{(228,298)}{5,878,482} = (.039)$

- STANDARD (1977) .029

(1976) .0002

- DISCUSSION

2. RETURN ON TOTAL ASSETS (ROTA)

- ROTA = $\frac{\text{NET OPERATING INCOME}}{\text{TOTAL ASSETS}}$

- ABC (1977) = $\frac{202,242}{14,439,938}$ = .014

- ABC (1976) = $\frac{(228,298)}{13,407,968}$ = (.017)

- STANDARD (1977) .022

(1976) .003

- DISCUSSION

3. EDUCATION REVENUE (ER)

- ER = $\frac{\text{EDUCATION REVENUE}}{\text{TOTAL OPERATING REVENUE}}$

- ABC (1977) = $\frac{6,333,668}{7,436,750}$ = .85

- ABC (1976) = $\frac{4,982,318}{5,878,482}$ = .85

- STANDARD (1977) .72

(1976) .72

- DISCUSSION

4. PATIENT CARE REVENUE (PCR)

- PCR = $\frac{\text{PATIENT CARE REVENUE}}{\text{TOTAL OPERATING REVENUE}}$

- ABC (1977) = $\frac{1,103,082}{7,436,750}$ = .15

- ABC (1976) = $\frac{896,164}{5,878,482}$ = .15

- STANDARD (1977) .285

(1976) .280

- DISCUSSION

5. TUITION/EDUCATION (TE)

- TE = $\frac{\text{TUITION REVENUE}}{\text{EDUCATIONAL REVENUE}}$

- ABC (1977) = $\frac{4,977,228}{6,333,668}$ = .79

- ABC (1976) = $\frac{3,509,642}{4,982,318}$ = .70

- STANDARD (1977) .70

(1976) .65

- DISCUSSION

6. REPORTED INCOME INDEX (RII)

- RII = $\frac{\text{NET OPERATIONG INCOME}}{\text{CHANGE IN ALL FUND BALANCE}}$

- ABC (1977) = $\frac{202,442}{528,642}$ = .38

- ABC (1976) = $\frac{(228,298)}{174,294}$ = (1.31)

- STANDARD (1977) .68

(1976) .28

- DISCUSSION

C. CAPITAL STRUCTURE RATIOS

1. CASH FLOW TOTAL DEBT (CFTD)

- CFTD = $\frac{\text{CASH FLOW}}{\text{TOTAL DEBT}}$

- ABC (1977) = $\frac{896,630}{9,093,820}$ = .099

- ABC (1976) = $\frac{95,774}{8,333,432}$ = .011

- STANDARD (1977) .39

(1976) .30

- DISCUSSION

2. EQUITY FINANCING RATIO (EF)

-EF = $\frac{\text{FUND BALANCE}}{\text{TOTAL ASSETS}}$

- ABC (1977) = $\frac{5,346,118}{14,439,938}$ = .37

- ABC (1976) $\frac{5,074,536}{13,407,968}$ = .38

STANDARD (1977) .56

(1976) .44

-DISCUSSION

3. TIMES INTEREST EARNED (TIE)

- TIE = $\frac{\text{NET OPERATING INCOME + INTEREST EXPENSE}}{\text{INTEREST EXPENSE}}$

- ABC (1977) = $\frac{202,442 + 477,190}{477,190}$ = 1.42

- ABC (1976) $\frac{(228,298) + 415,130}{415,190}$ = .45

- STANDARD (1977) 5.96

(1976) 4.55

- DISCUSSION

D. ACTIVITY RATIOS

1. TOTAL ASSET TURNOVER (TAT)

- TAT + $\frac{\text{TOTAL OPERATING REVENUE}}{\text{TOTAL ASSETS}}$

- ABC (1977) = $\frac{7,436,750}{14,439,938}$ = .51

-ABC (1976) = $\frac{5,878,482}{13,407,968}$ = .44

- STANDARD (1977) .59

(1976) .74

- DISCUSSION

E. LIQUIDITY RATIOS

1. CURRENT (C)

- C = $\frac{\text{CURRENT ASSETS}}{\text{CURRENT LIABILITIES}}$

- ABC (1977) = $\frac{1,279,086}{278,938}$ = 4.58

- ABC (1976) = $\frac{493,878}{71,926}$ = 6.86

- STANDARD (1977) 3.03

(1976) 2.58

- DISCUSSION

2. DAYS IN STUDENT LOANS (DSL)

- DSL = $\frac{\text{LOANS TO STUDENTS}}{\frac{\text{TUITION}}{365}}$

- ABC (1977) = $\frac{2,148,590}{\frac{4,977,228}{365}}$ = 157.6

- ABC (1976) = $\frac{2,043,716}{\frac{3,509,642}{365}}$ = 212.5

- STANDARD (1977) 82.7

(1976) 101.8

- DISCUSSION

3. AVERAGE PAYMENT PERIOD (APP)

$$\text{- APP} = \frac{\text{CURRENT LIABILITIES}}{\frac{\text{TOTAL OPERATING EXPENSES - DEPRECIATION}}{365}}$$

$$\text{- ABC (1977)} = \frac{278,938}{\frac{7,234,288 - 694,188}{365}} = 15.6$$

$$\text{- ABC (1976)} = \frac{71,926}{\frac{6,106,780 - 324,072}{365}} = 4.5$$

- STANDARD (1977) 53.6

(1976) 45.1

- DISCUSSION

4. DAYS CASH ON HAND (DCH)

$$\text{- DCH} = \frac{\text{CASH}}{\frac{\text{TOTAL OPERATING EXPENSES - DEPRECIATION}}{365}}$$

$$\text{- ABC (1977)} = \frac{815{,}826}{\frac{7{,}234{,}288 - 694{,}188}{365}} = 45.5$$

$$\text{- ABC (1976)} = \frac{227{,}852}{\frac{6{,}106{,}780 - 324{,}072}{365}} = 14.4$$

- STANDARD (1977) 61.0

(1976) 38.4

- DISCUSSION

F. OTHER INDICATORS

1. AVERAGE AGE (AA)

- AA = $\frac{\text{ACCUMULATED DEPRECIATION}}{\text{DEPRECIATION}}$

- ABC (1977) = $\frac{1,713,324}{694,188}$ = 2.47

- ABC (1976) = $\frac{1,028,568}{324,072}$ = 3.17

- STANDARD (1977) 5.5

(1976) 6.0

- DISCUSSION

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2. OPERATING MARGIN - PRICE ADJUSTED (OMPA)

$$\text{- OMPA} = \frac{\text{CASH FLOW-PRICE ADJUSTED DEPRECIATION}}{\text{TOTAL OPERATING REVENUE}}$$

$$\text{- ABC (1977)} = \frac{896{,}630 - 792{,}262}{7{,}436{,}750} = .014$$

$$\text{- ABC (1976)} = \frac{95{,}774 - 440{,}738}{5{,}878{,}482} = (.059)$$

- STANDARD (1977) .009

(1976) (.026)

- DISCUSSION

3. REPLACEMENT VIABILITY (RV)

$$\text{- RV} = \frac{\text{CASH + INVESTMENTS}}{\text{ACCUMULATED DEPRECIATION (PRICE ADJUSTED) X EQUITY FINANCING}}$$

$$\text{- ABC (1977)} = \frac{1,250,276}{1,953,189 \times .37} = 1.73$$

$$\text{- ABC (1976)} = \frac{680,304}{1,398,852 \times .38} = 1.28$$

- STANDARD (1977) .94

(1976) .85

- DISCUSSION

55

4. REVENUE GROWTH (RG)

$$\text{RG} = \left[\frac{\text{TOTAL OPERATING REVENUE (CURRENT YEAR)}}{\text{TOTAL OPERATING REVENUE (PAST YEAR)}}\right] - 1.0$$

$$\text{ABC (1977)} = \frac{7,436,750}{5,878,482} = 1.00 = .27$$

- STANDARD (1977) .18

- DISCUSSION

5. EXPENSE GROWTH (EG)

$$\text{EG} = \left[\frac{\text{TOTAL OPERATING EXPENSE (CURRENT YEAR)}}{\text{TOTAL OPERATING EXPENSE (PAST YEAR)}}\right] - 1.00$$

$$\text{ABC (1977)} = \frac{7,234,288}{6,106,780} - 1.00 = .184$$

- STANDARD (1977) .123

- DISCUSSION

6. ASSET GROWTH (AG)

$$- AG = \left[\frac{\text{TOTAL ASSETS (CURRENT YEAR)}}{\text{TOTAL ASSETS (PAST YEAR)}}\right] - 1.00$$

$$- ABC\ (1977) = \frac{14,439,938}{13,407,968} - 1.00 = .076$$

- STANDARD (1977) .373

- DISCUSSION

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FINANCIAL RATIO AVERAGES
COLLEGES OF PODIATRY AND OPTOMETRY
1976 - 1977

	1977	1976	RANGE
LIQUIDITY			
CURRENT	3.03	2.58	1.86 - 4.47
DAYS IN STUDENT LOANS	82.7	101.8	22.5 - 212.5
AVERAGE PAYMENT	53.6	45.1	4.5 - 87.8
DAYS CASH	61.0	38.4	15.1 - 99.6
CAPITAL STRUCTURE			
CASH FLOW/DEBT	.39	.30	-.02 - 1.4
EQUITY FINANCING	.56	.44	.31 - .91
TIMES INTEREST EARNED	5.96	4.55	-1.96 - 24.1
ACTIVITY			
TOTAL ASSET.	.59	.74	.43 - 1.49
PROFITABILITY			
MARGIN	.029	.0002	-.053- .15
REPORTED INCOME	.68	.28	-1.31 - 1.35
RETURN ON ASSETS	.022	.003	-.023- .10
EDUCATION REVENUE	.715	.720	.565- .85
PATIENT CARE REVENUE	.285	.280	.150- .435
TUITION/EDUCATION	.700	.652	.60 - .79
OTHER			
AVERAGE AGE	5.5	6.0	2.47 - 11.1
MARGIN-PRICE ADJ.	.009	.026	-.061- .122
REPLACEMENT VIABILITY	.94	.85	.23 - 1.73
REVENUE GROWTH	.178	NA	.08 - .27
EXPENSE GROWTH	.123	NA	.08 - .18
ASSET GROWTH	.373	NA	.01 - 1.27

ABC COLLEGE

BALANCE SHEET

June 30, 1977

ASSETS

	CURRENT YEAR	PRIOR YEAR
Current funds:		
Unrestricted:		
Cash	$ 815,826	$ 227,852
Investments	235,094	101,772
Accounts receivable	18,610	10,412
Notes receivable - students & employees	55,192	27,930
Inventories, at lower of cost of market	130,248	116,672
Prepaid expenses and deposits	24,116	9,240
Due from plant funds	2,836	-
Total current funds	1,281,922	493,878
Loan funds:		
Cash	289,606	110,958
Loans to students	2,148,590	2,043,716
Due from current funds	2,100	-
Total loan funds	2,440,296	2,154,674
Plant funds:		
Unexpended:		
Cash	34,372	63,484
Pledges receivable, less allowance of $50,000 current year - $143,600 prior year	164,984	287,196
Prepaid expenses	-	4,502
Due from current fund	-	9,046
Unamortized cost of mortgage loan	254,682	264,116
Total unexpended	454,038	628,344
Retirement of indebtedness:		
Deposit with trustee	581,034	534,294
Investment in plant:		
Land	1,790,952	1,790,952
Building	8,276,608	7,659,298
Furniture and equipment	1,331,248	1,175,096
	11,398,808	10,625,346
Less - accumulated depreciation	1,713,324	1,028,568
Total investment in plant	9,685,484	9,596,778
Total plant funds	$10,720,556	$10,759,416

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LIABILITIES AND FUND BALANCES

	CURRENT YEAR	PRIOR YEAR
Current funds:		
Unrestricted:		
Accounts payable	$ 85,998	$ 13,130
Advance tuition and fees	190,840	49,750
Due to plant funds	-	9,046
Due to loan funds	2,100	-
Fund balances:		
Restricted	43,358	87,402
Unrestricted	959,626	334,525
Total current funds	1,281,922	493,878
Loan funds:		
Fund balances:		
U.S. Government equity	2,206,208	1,949,148
College equity	234,088	205,526
Total loan funds	2,440,296	2,154,674
Plant funds:		
Unexpended:		
Accounts payable	60,756	57,840
Due to current fund	2,836	-
Fund balance	390,446	570,504
Total unexpended	454,038	628,344
Retirement of indebtedness:		
Fund balance	581,034	534,294
Investment in plant:		
Notes payable	1,127,918	774,518
Mortgage payable	5,420,000	5,480,000
Net investment in plant	3,137,566	3,342,260
Total investment in plant	9,685,484	9,596,778
Total plant funds	$10,720,556	$10,759,416

ABC COLLEGE

STATEMENT OF CHANGES IN FUND BALANCE

FOR THE YEAR ENDED JUNE 30, 1977

	Unrestricted	Restricted	Loan Funds	Plant Fund
Revenues and other additions:				
Educational and general revenues	$ 7,135,640	$ 301,110	$	$
Pledges and gifts				16,930
U.S. Government advances			246,488	
Investment income				28,416
Interest on loans receivable			33,924	
Miscellaneous				412
	$ 7,135,640	$ 301,110	$ 280,412	$ 45,768
Expenditures and other deductions:				
Educational and General	5,742,670	213,798		
Loan Cancellations			3,920	
Interest on indebtedness				477,190
Depreciation and amortizations				694,188
Bad debt				84,266
Administrative expense			18,256	
	5,742,670	213,798	22,176	1,255,644
Transfer among funds:				
Additions (Deductions):				
Matching of government advance to loan fund	(27,386)		27,386	
Renewals, replacements, principal and interest	(871,864)			871,864
Restriction removed from gift	54,000	(54,000)		
Total transfers	(845,250)	(54,000)	27,386	871,864
Net increase (decrease) for the year	625,076	(44,044)	285,622	(338,012)
Fund balance at beginning of year	334,555	87,402	2,154,674	4,447,058
Fund balance at end of year	$ 959,626	$ 43,358	$2,440,296	$ 2,054,523

ABC COLLEGE

STATEMENT OF CHANGES IN FUND BALANCE

FOR THE YEAR ENDED JUNE 30, 1976

	Unrestricted	Restricted	Loan Funds	Plant Fund
Revenues and other additions:				
Educational and general revenues	$ 5,732,040	$ 146,442	$	$
Pledges and gifts				38,896
U.S. Government advances			297,178	
Investment income				46,770
Interest on loans receivable			19,306	
Miscellaneous				360
	5,732,040	146,442	316,484	43,063
Expenditures and other deductions:				
Educational and general	5,158,642	147,892		
Loan cancellations			1,980	
Interest on indebtedness				415,190
Depreciation and amortization				324,072
Increase in allowance for bad debts				56,878
Administrative expense			2,126	
	5,158,642	147,892	4,106	796,140
Transfer among funds -				
Additions (deductions):				
Mandatory				
Matching of Government advance to loan fund	(33,020)		33,020	
Renewals, replacements, principal and interest	(660,524)	-		660,524
Total transfers	(693,544)	-	33,020	660,524
Net increase (decrease) for the year	(120,146)	(1,450)	345,398	49,490
Fund balance at beginning of year	454,696	88,852	1,809,276	4,496,548
Fund balance at end of year	$ 334,550	$ 87,402	$2,154,674	$ 4,447,058

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FINANCIAL ANALYSIS

CASE EXAMPLE

XYZ COLLEGE
GENERAL FUND

BALANCE SHEET

JUNE 30, 1977

ASSETS

CASH	$ 971,982
RECEIVABLES	
ACCOUNTS RECEIVABLE STUDENTS, NET OF ALLOWANCE FOR DOUBTFUL ACCOUNTS OF $12,000	54,543
RECEIVABLE FROM OTHER FUNDS	6,210
OTHER RECEIVABLES	55,761
INVENTORIES (NOTE 1)	214,667
PREPAID EXPENSES	24,272
PROPERTY AND EQUIPMENT, NET OF ACCUMULATED DEPRECIATION OF $1,131,249 (NOTES 1 AND 2)	5,525,468
ADVANCES TO LOAN FUNDS	111,317
OTHER ASSETS	4,046
TOTAL ASSETS	$6,968,266

LIABILITIES AND FUND BALANCE

ACCOUNTS PAYABLE	$ 215,881
TUITION AND OTHER DEPOSITS	77,400
ACCRUED EXPENSES	2,900
UNDISTRIBUTED SCHOLARSHIPS	7,467
NOTES AND MORTGAGES PAYABLE (NOTE 2)	358,667
RECEIPTS IN EXCESS OF EXPENDITURES ON CERTAIN GRANTS	7,012
	$ 669,327
CONTINGENCIES (NOTES 3 AND 4)	
FUND BALANCE	
UNDESIGNATED	$1,132,997
INVESTMENT IN PROPERTY AND EQUIPMENT	5,165,942
	$6,298,939
TOTAL LIABILITIES AND FUND BALANCE	6,968,260

XYZ COLLEGE
GENERAL FUND

BALANCE SHEET

JUNE 30, 1976

ASSETS

CASH	$ 508,610
RECEIVABLES	
ACCOUNTS RECEIVABLE STUDENTS, NET OF ALLOWANCE FOR DOUBTFUL ACCOUNTS OF $12,000	95,464
RECEIVABLE FROM OTHER FUNDS	6,587
OTHER RECEIVABLES	15,155
INVENTORIES (NOTE 1)	160,201
PREPAID EXPENSES	23,004
PROPERTY AND EQUIPMENT, NET OF ACCUMULATED DEPRECIATION OF $860,950 (NOTES 1 AND 2)	5,265,3000
ADVANCES TO LOAN FUNDS	88,276
OTHER ASSETS	4,240
TOTAL ASSETS	$6,166,837

LIABILITIES AND FUND BALANCE

ACCOUNTS PAYABLE	$ 122,572
TUITION AND OTHER DEPOSITS	78,520
ACCRUED EXPENSES	43,397
UNDISTRIBUTED SCHOLARSHIPS	1,616
NOTES AND MORTGAGES PAYABLE (NOTE 2)	287,872
TOTAL LIABILITIES	$ 533,977
CONTINGENCIES (NOTE 3)	
FUND BALANCE	
UNDESIGNATED	$ 655,432
INVESTMENT IN PROPERTY AND EQUIPMENT	4,977,428
TOTAL FUND BALANCE	5,632,860
TOTAL LIABILITIES AND FUND BALANCE	$6,166,837

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GENERAL FUND

STATEMENT OF CURRENT REVENUES, EXPENDITURES
OTHER CHARGES AND FUND BALANCE
FOR THE YEAR ENDED JUNE 30, 1977

REVENUE		
FEES, SERVICES AND SALES		$1,476,485
COST OF MATERIALS SOLD		811,520
		$ 664,965
TUITION AND FEES		1,822,862
CONTINUING EDUCATION		69,277
CONTRIBUTIONS		262,707
INTEREST		41,535
GOVERNMENT AND OTHER GRANTS		795,500
OTHER REVENUES		31,787
TOTAL REVENUE		$3,688,683
EXPENDITURES		
SALARIES AND WAGES		$1,792,590
WORK STUDY		50,543
LEASE FEES		16,556
SUPPLIES		95,080
REPAIRS AND MAINTENANCE		24,355
GROUNDS AND MAINTENANCE		10,431
BUILDING MAINTENANCE		42,587
OUTSIDE SERVICES		23,367
UTILITIES		91,557
TELEPHONE		44,692
POSTAGE		21,144
BAD DEBTS AND COLLECTION		9,908
COMPUTER FEES		13,752
PRINTING		54,817
DUES		14,459
EMPLOYEE BENEFITS		165,812
PROPERTY TAXES		6,737
PROFESSIONAL FEES		11,732
INTEREST		28,856
INSURANCE		45,304
TRAVEL		51,481
HONORARIA		22,279
MEETINGS		13,465
ENTERTAINMENT		5,689
DEVICES AND MATERIALS		3,687
OTHER EXPENSE		91,981
		2,752,861
OTHER CHARGES		
DEPRECIATION		270,416
TOTAL EXPENDITURES AND OTHER CHARGES		3,023,277
NET INCREASE IN FUND BALANCE		$ 665,406
FUND BALANCE, BEGINNING		5,632,860
FUND BALANCE, ENDING		$6,298,266

XYZ COLLEGE
GENERAL FUND

STATEMENT OF CURRENT REVENUES, EXPENDITURES
OTHER CHARGES AND FUND BALANCE
FOR THE YEAR ENDED JUNE 30, 1976

REVENUE	
FEES, SERVICES AND SALES	$1,175,998
COST OF MATERIALS SOLD	695,880
	$ 480,118
TUITION AND FEES	1,543,333
CONTRIBUTIONS	100,441
INTEREST	33,919
GOVERNMENT AND OTHER GRANTS	729,333
OTHER REVENUES	19,396
TOTAL REVENUE	$2,906,540
EXPENDITURES	
SALARIES AND WAGES	$1,595,998
PAYROLL TAXES	77,561
CONTRIBUTION TO EMPLOYEES' RETIREMENT FUND	14,900
INSURANCE	30,788
UTILITIES	80,480
REPAIRS AND MAINTENANCE	74,355
DEVELOPMENT EXPENSE	18,577
POSTAGE AND TELEPHONE	62,450
OPERATING EXPENSES	45,755
PRINTING AND REPRODUCTION	68,466
CONTINUING EDUCATION	9,521
PROFESSIONAL FEES	20,131
DUES	12,783
PROPERTY TAXES	10,800
INTEREST EXPENSE	22,903
ADMINISTRATIVE EXPENSE	29,956
RESEARCH	16,088
SCHOOL SCREENING	764
BASIC AND VISUAL SCIENCES	7,287
OPTOMETRY DEPARTMENT	6,372
FACULTY EXPENSE	15,555
REHABILITATION GRANT	15,056
LIBRARY	4,035
AUDIO-VISUAL	8,228
BAD DEBTS	924
SPECIAL EVENTS	10,156
OTHER EXPENSE	53,533
	2,313,422
OTHER CHARGES	
DEPRECIATION	260,589
TOTAL EXPENDITURES AND OTHER CHARGES	2,574,011
NET INCREASE IN FUND BALANCE	$ 332,529
FUND BALANCE, BEGINNING	5,300,331
FUND BALANCE, ENDING	$5,632,860

XYZ COLLEGE

FINANCIAL RATIOS

1976 - 1977

FINANCIAL RATIO:	1977	1976
LIQUIDITY:		
CURRENT	4.47	3.31
DAYS IN STUDENT LOANS	10.9	22.5
AVERAGE PAYMENT	30.5	29.7
DAYS CASH ON HAND	99.6	61.7
CAPITAL STRUCTURE:		
CASH FLOW/DEBT	1.4	1.01
EQUITY FINANCING	.90	.91
TIMES INTEREST EARNED	24.11	15.53
ACTIVITY:		
TOTAL ASSET	.65	.58
PROFITABILITY:		
MARGIN	.15	.09
REPORTED INCOME	1.00	1.00
RETURN ON ASSETS	.10	.05
EDUCATION REVENUE	.67	.67
PATIENT CARE REVENUE	.33	.33
TUITION/EDUCATION	.60	.64
OTHER:		
AVERAGE AGE	4.18	3.30
MARGIN-PRICE ADJUSTED	.122	.052
REPLACEMENT VIABILITY	.66	.48
REVENUE GROWTH	.25	--
EXPENSE GROWTH	.17	
ASSET GROWTH	.13	

Module 2

Presenters: Alvin L. Morris, D.D.S., Ph.D.
Charles F. Mullen, O.D.
Malvin C. Mauney, O.D.

Wednesday, January 31, 1979

The panel on revenue generation was well received, and its presentation being considered in the deliberations of the business officers group discussed earlier. By far the greatest interest related both to this area and a later presentation on full-cost tuition, in terms of generating earned, non-Federal and non-student income.

HOW TO SURVIVE WITHOUT FEDERAL FUNDS

Alvin L. Morris, D.D.S., Ph.D.

Presented to Allied Health Deans, April 28, 1977
at Spring Meeting of ASAHP

INTRODUCTION

There are many reasons why I am pleased to be a participant in your Spring Meeting. Few of you may know that Bill Samuels and I have been working colleagues and friends since our earliest days at the University of Kentucky and events such as this that renew our working relationship are most welcome.

There is a strong urge to spend much of my time this morning emphasizing the close relationship which is enjoyed between ASAHP and the Association for Academic Health Centers. Your President and Bill Samuels are active participants on our Committee of Presidents and I must underscore the excellent manner in which you have been represented by Ralph Boatman, Tom Barker and Rhodes Haverty. We are most happy that Joe Hamburg has agreed to serve on the Steering Committee of our Kellogg Foundation-supported project on the Governance and Structure of Academic Health Centers. Other examples of our mutual involvement could be cited but I will leave it to your officers to keep you abreast of our relationships.

Another reason I am pleased to be here is simply because I became intrigued with the subject which Bill Samuels assigned to me, "How to Survive Without Federal Funds." Had I known this group better, I would have been tempted to say, "Poorly" and sit down. I wondered if anything could be said on this subject which could have more significance or impact than developing guidelines for rearrangement of the deck chairs on the Titanic. It was realized that this is a subject about which I should do some serious thinking and one which is almost equally germane to all the health fields. I was reassured by the sentence in Bill Samuel's letter which said, "No one is expecting anyone to have the answers to this question." I have, nonetheless, developed some thoughts on the subject which I am pleased to share with you — with the full realization that many of them are neither comforting nor satisfying. At the risk of sounding more philosophical and less practical than would be your preference, I feel the need to develop some background and put the subject into perspective.

FEDERAL FUNDS WILL NOT DISAPPEAR

You won't have to survive without Federal funds. It is true that you may have to survive without Federal funds earmarked specifically for Allied Health which come directly to your office in support of your programs. However, Federal funds will continue to flow to your institution even though not directly

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Dr. Morris is Executive Director of the Association for Academic Health Centers, Suite 1214, 1901 North Fort Myer Drive, Arlington, Virginia 22209.

to you. There will always be funds flowing directly to other programs in your institution. Many of these in the future will be more closely linked with payment for potential services. And future funds will come in new forms and for new purposes.

The point which must not be missed is that money to any part of your institution frees money for administrators to distribute in support of your programs. This fact applies equally to two-year programs and those not located in academic health centers. You are kidding yourself if you pretend that these kinds of funds do not matter to you. In a very real sense the nature and quantity of these kinds of funds are going to be important to you. You have a real and direct stake in the flow of Federal dollars to your institutions, even though they are not earmarked for you.

WHAT WILL INFLUENCE FLOW OF FEDERAL DOLLARS

If Federal money is going to come and is going to be important to you, you have a very real interest in what will influence its nature and magnitude. I am going to refer to three influences realizing that this is not the first time you have heard or thought about them. Also, I recognize that considering them will create discomfort in that they are factors over which the Allied Health professions have little direct control. Nonetheless, I believe we are all well-served by taking a realistic view of the future. I would like to speak to the role of society, the role of medicine and the economics of our time, as these factors will influence the availability of Federal dollars. In my opinion, these factors will also influence the availability of state monies and dollars obtained through private giving.

Role of Society

Most of us have, on various occasions, heard or read the statement that the health professions were created by society in response to needs of society. I had a friend who used to counter my enthusiasm by reminding me that the health fessions are not divine in their origin and that what society giveth, society can taketh away. I believe the truth of these statements is something we have always known; but, I fear, we are reluctant to admit to their profoundness or their relevance.

My purpose in bringing this issue before you today is to emphasize my belief that these statements have high applicability in the real world of 1977. Specifically, it is my opinion that society's current role in shaping the health professions is of such magnitude to cause me to question whether the professions have control of their own destiny. Thus, it would serve us well to examine those factors which are influencing society's view of the health professions.

I would first ask you to think about the general social milieu in which the health professions are now functioning. What is the public attitude?

Basically, it is one of being disturbed and disaffected relative to the health care system. There is a growing alienation between the public at large and corporate medicine. The problem is painfully simple in its description. The public is dissatisfied with the access they have to health care and with the high cost.

At the family level, seeking and paying for health care have become preoccupying activities in many homes. In addition to worrying about the cost, there exists, in the majority of homes, the basic insecurity of not knowing where to turn — the first step to take — if illness strikes tonight.

At the Federal level, there is increasing attention to and discomfort about the percent of the Gross National Product now being consumed by health expenditures.

Adding to the public tension is the generally accepted fact that things have gotten worse over the past decade, instead of better.

To ignore the public sentiment as unimportant, or as too vague and ill-defined to really matter is, in my opinion, to make a mistake. For it is precisely this public sentiment which is driving the action in Washington. And that action will, all too soon, be clear and well-defined, and will be directly influencing our professions.

In spite of how nicely balanced your professions may appear to be, and in spite of how comfortable you are with your arguments to the contrary, I have confidence in the accuracy of the generalization that American citizens are unhappy, because they have difficulty finding health care; and when they find it, they complain, because it costs too much. And, when things change in the health professions, by whatever mechanism, remember the change will be traceable back to those two fundamental facts.

There is a tendency to look at the public and its health problem as being independent or even isolated from the other issues confronting the nation. I would ask you to think with me for a moment, in broadest terms, about what I call the nation's social dilemma, and about the implications of that dilemma to the health professions.

The past decade has been a sobering one for us Americans. Some unexpected firsts were experienced by all of us. We found out that we can lose a war, that the European money market can manhandle our dollar, and that decisions made in a group of oddly dressed people thousands of miles away determine what happens to you, when you go to the corner gas station. Suddenly, in this country "bigger" no longer automatically means "better." Abruptly, it has dawned on us that in satisfying our every whim and desire for the good life, our energy resources are actually running out. Some claim that in abusing our environment, we have even threatened our capacity for survival. As a society, we have come to realize that there is a price tag on everything and — ultimately — someone has to pay; that the longer you delay paying, the higher the price becomes; and that all those bills that we as citizens are so ready to turn over to the government are really being paid for with our own money.

Perhaps for the first time the American society has come to recognize the realities of economic life: namely, that resources are scarce in relation to human wants, that resources have alternate uses, and that people do indeed have different wants, and that there is significant variation in the relative importance that people attach to them.

What I am attempting to present is the rationale for the idea that the American public viewpoint regarding health care no longer may be the one taken for granted by the health professions. It has been comforting to assume that the public, automatically, wants the best we have to offer and that no one would challenge our perceptions of what we have decided are desirable health goals for the citizenry. The fact is, in 1977, we may have more in common with the Cadillac salesman than we would like to admit. We may be touting a product that is bigger, flashier, higher priced, and more expensive to run than the public really wants.

Indeed, the health professions do not have control of their own destiny. That control is lodged both in society and the professions. The outcome will reflect, more than any other factor, the congruence which can be achieved between what it is the public needs and what it is the professions are prepared to deliver.

The Role of Medicine

Most Allied Health professionals are strongly influenced by his or her medical colleagues in everyday practice. While relationships in the practice setting are worthy of further discussion, my remarks today are focused on the view that medicine's primary influence on the other health professions is an indirect one. What I am referring to is the fact that the public's attitude toward health and health care is overwhelmingly influenced by medicine. As public attitude prompts public reaction and finds expression in Federal legislation, other professions ride with medicine along the tides of social change. It is prudent, therefore, for all professions to examine closely the currents which are buffeting medicine today.

The public at large and the body politic are particularly critical of two characteristics of the medical profession: the geographic maldistribution of physicians and the manner in which physicians are maldistributed by specialty. The statistical data which justify these criticisms cannot be disputed. The most potent legislative thrusts in Washington are aimed at these two problems. The apparent inability of medicine to solve the first problem is viewed with increasing impatience. The unwillingness of medicine to solve the second is viewed with mounting distrust.

With increasing frequency, voices are raised to lament the lack of congruence between the public's needs and the ongoing tendency for medicine to build complexity and sophistication into the educational system.

What the public obviously wants and apparently needs is primary care. They want help in entering the medical care system and wish to know who will man the gate. The internists and pediatricians say, "We're the gate keepers" and certainly some element of their practice is primary care. The entire family practitioner movement, frequently stimulated from without the profession, is in response to the primary care need. But gathering at the gate, now, are also nurse practitioners and physician assistants. As the pharmacy profession moves to the future, an important primary care function is being described. Thus, things are getting crowded at the gate and medicine is becoming embroiled in what I call a new era of "Portal Politics."

Another key issue facing medicine is the foreign medical graduate problem. It is now widely known that one-third of all the internship and residency training positions in American hospitals are filled by physicians trained outside the country. Foreign medical graduates now approach 21 percent of all physicians in the United States. It is being said by medicine that they should be phased out of our health care system on the basis of the view that they are inadequately trained to provide care. Questions being asked are, "Can you prove American-trained physicians provide a higher quality of care?" and "How can the hospitals which provide a large percent of the inpatient care received by the residents of inner cities be kept open in the absence of foreign medical graduates?" The answer to both these questions may prove difficult.

Other problems could be cited, but, the point has been made that the medical profession is being challenged by a restless public. The need for effective leadership is most pressing.

Dr. Charles Edwards, who served as Assistant Secretary for Health of the Department of Health, Education and Welfare, made the following disturbing remarks in the New England Journal of Medicine: "What deeply concerns me," he wrote, on the basis of five years of government service, "is that I see little evidence that the huge federal involvement in the American health care system either has been or is now being guided by persons who have a clear and sophisticated perception of the impact of their decisions and actions." He said the pluralistic health care system "is moving steadily toward its own destruction, not by design, but by default."

With the advent of third-party payment for health services, voice was given to the second party, the patient consumer. Consumer representation now is included on all forms of health councils and will bring influence to bear on any future plans for health care delivery, both large and small. When national health insurance becomes a reality, the public will have the ultimate podium from which to speak.

And we must listen — carefully. Most of the message in the next decade will be directed at medicine. It must be recognized that much of the future will be influenced by public response to medicine. It will not be possible to separate the future thrusts in health care of the professions. If medicine is sensitive and responsive to the public voice, public policy, as reflected in patient behavior and federal legislation, can be expected to move in directions

desirable for all. If, however, medical leadership attempts to maintain an orbital path, independent of the gravitational pull of public sentiment and social change, its reentry into the real world of tomorrow will be to an environment uncongenial to medicine and all health professions.

It is hoped that these comments are not interpreted as a personal criticism of our medical colleagues. I have attempted to report — not editorialize — on the current dilemma faced by the medical profession. Reactions to that dilemma by the public, the government and the medical profession deserve your closest scrutiny; and, I suggest to you, they will be influencing the future of the allied health professions.

The Economics of our Time

Some of my remarks today are taken from a paper I presented in California last June at a Symposium on Health Sciences Education in the 21st Century. Also on the program was economist Dr. Rashi Fein of Harvard. I want to share with you a portion of his paper which I believe will be of interest to you. I quote:

> "Discussions of health manpower often elaborate on the creation of new kinds of personnel and offer evidence or theory regarding the usefulness of such personnel in rationalizing the use of labor in the health industry. We are all aware of the articles that have been written and of the experiments and demonstrations that have been mounted to show that new types of health professionals can add significantly to the efficiency of the health care delivery system; can economize on total resource use; and can, in many situations, improve quality. Such demonstrations are extremely valuable. Unfortunately, on occasion, many of us exhibit a tendency to assume that if we can demonstrate and document the fact that something makes sense that this will lead to the implementation of the newly discovered, sensible arrangements. Perhaps we are influenced by our understanding of the general economy in which it is alleged that if one builds a better mousetrap, the world will beat a path to his or her door. The health care market, however, is not financed in a fashion that provides sufficient incentive for the rationalization of labor inputs. In this particular market, we cannot simply assume that creating supplies of particular kinds of health professionals will necessarily lead to the creation of demand and of jobs for them even when such personnel increase efficiency.
>
> Even more than this is involved. We must recognize that a very substantial expansion in physician supply is now taking place. Furthermore, there is an apparent significant increase in the proportion of newly trained physicians who are entering primary care and family practice. Thus, the emphasis on non-physician personnel — personnel who could deliver medical care services that, in the past, were offered by physicians (or that simply were not available), personnel

that do not require the physician's long span of intensive training -- comes at the very moment that we witness the increase in physician personnel. If we assume (and there is every reason to do so) that the number of physicians will continue to grow and grow significantly, we must recognize the possibility that this expansion will have a considerable negative impact on the willingness of physicians to employ these new, additional health professionals. It is far too early to reach any definitive conclusion on this matter either in some national sense or, of course, at the individual state level. Yet, an examination of the relevant data and consideration of the economics of labor markets suggests that non-physician personnel may find it increasingly difficult to find employment except under two circumstances: (a) in certain institutions that, under the pressure of fiscal stringency, may use these physician extenders or substitutes in place of physician manpower and (b) certain geographic regions (generally rural) where the demand on certain supplies of physicians may provide sufficient impetus to reorganize their practices and utilize this kind of help. If this is the case, the implications for the training of physician extenders of various kinds is clear."

HOW TO SURVIVE WITHOUT ENOUGH MONEY

Having discussed the flow of funds into your institutions and some of the factors which will influence their magnitude, I would like to attempt to suggest some partial answers to the very real and fundamental question before you: How to survive without enough money?

A New Orientation

First of all, I think we as academic administrators must go through a period of becoming reoriented to our task. Leadership in health sciences education is currently vested in a generation of professionals who came up during what is now referred to with nostalgia as the golden years in higher education. Nowhere was the affluence of those years in greater abundance than in the environment where health professionals treated patients, taught students, and conducted research. As products of those years, many of us are ill-suited by virtue of experience and temperament to confront the realities of the seventies. Our rhetoric is charged with such terms as storekeeping, retrenchment, and the management of decline. But this too shall pass, and better, though different, days are ahead.

These are tough days in which to be deans. We must adapt to different and difficult challenges -- and learn to do it from a positive outlook. Discouraged, negative-thinking deans tend to spawn discouraged and negative-thinking faculty and an environment in which adaptation and change are seriously compromised.

A New Mode of Operating

I believe that in order to survive without enough money it will be necessary to develop a new institution-wide philosophy and mode of operating.

Program directors, department chairmen and faculty whose financial needs are being met are basically indifferent to how the dean's office functions and what is happening in other disciplines. But when their demands cannot be met and they feel deprived, the dean's office comes under a totally different type of scrutiny. Faculty must be widely involved and well-informed if they are to accept the hard decisions which are called for these days.

This factor is going to become increasingly important in the future when our financial problems begin to impact even more directly on faculty salaries. While, in general, it has been possible to continue escalating health professional salaries even as programs were deprived of funds, in the future faculty salaries will share in the deprivation to a larger extent. Faculty who understand the "big picture" as it is confronted by the dean will be better prepared to accept the changes of the future.

It is recognized that many allied health schools present an unusually difficult challenge for the dean by virtue of the fact that he usually presides over a wide range of disciplines which are essentially independent from one another in their programs. Developing a common thread of understanding for a sharing of concerns is indeed a challenge.

Accountability

In order to establish priorities wisely, make decisions which can be defended, and compete successfully for institutional funds, a new measure and magnitude of accountability will inevitably be imposed upon academic administrators in the future.

In the face of fiscal stringency, it is going to be essential that those responsible for programs, departments and schools be able to document answers to the questions: Are your program objectives valid, and to what extent are they being met? Accountability is going to become the name of the game and the skills and techniques of playing that game must be learned by us all.

Productivity and Efficiency

In seeking how to survive with inadequate finances, one cannot avoid confronting the issues of efficiency and productivity -- even though they are uncomfortable issues with which to deal. Although not pleasant to admit, I am persuaded that there is a great deal of inefficiency in all of higher education. Good education versus mediocre education cannot be defined and can only be subjectively recognized. And yet, most of us staunchly defend our traditional approaches primarily on the basis that they work.

How much of what we do can really be defended as untouchable in the face of hard, hard financial decisions which must be made? I have the notion that at least some of our educational programs can be done as well, or perhaps better, by utilizing different approaches and methodology which cost less money. I'll not try to be more specific, but I do believe that the issues of efficiency and productivity must ultimately be addressed by deans and faculty faced with difficult, serious money problems.

In the interest of efficiency and productivity, the sharing of resources will be both a necessary and an attractive characteristic of health education in the future. Likewise, it can be anticipated that interdisciplinary education in the classroom and in the patient care setting will eventually become routine. Academic planning by one profession in isolation is a luxury of the past. Consequently, effective planning for the future requires a reasonable level of understanding regarding all the professions by all engaged in the process.

While speaking of efficiency and productivity, I cannot resist at least a brief reference to accreditation of educational programs. This is not the time or place to explore the entire accreditation dilemma, but one point seems highly relevant to this discussion. In the face of serious financial difficulties in health manpower education, we simply cannot afford to waste the resources (both dollars and people) required to sustain our present system of accreditation.

No Such Thing as a Free Lunch

Although it may appear contradictory to other remarks, part of the skill of long-range survival without enough money is knowing when to turn down money. From various sources at various times, dollars become available for the initiation of a new program which falls within the current special interest of foundations and governments. Start-up funds and several years of basic support may be relatively easy to obtain. There was a time when we all grabbed at such money, rationalizing that almost any program is worthwhile and that surely some way could be found at some future time to sustain it. We found it easy to ignore the fact that support for such programs come with a time limit and usually a commitment on our part that they be continued.

But these are different times. Before accepting such money today, thoughtful attention should be addressed to the following questions: Are you prepared to substitute the program priorities of an external funding agency for your own? Which existing program are you prepared to sacrifice in order to support the new program when the money is gone?

Program Termination

How to survive without enough money? One answer which seems almost inescapable is to learn the difficult and complicated process by which programs are terminated. The decision-making process is tough enough. Even when we know programs should be dropped, however, most of us simply don't have the experience

to know how to go about it. I cannot avoid the conclusion, however, that the future will require that all deans learn that painful lesson.

A CALL FOR STATESMANSHIP

By the twenty-first century recent history will have provided many lessons for the special interest groups of today. The environmentalists will have learned that the self-righteous shall not inherit the earth. Other groups will have accommodated to the fact that neither Ralph Nader nor Barbara Walters served our nation as its president. The wisdom of not replacing the FBI with the staff of the Washington Post will be recognized. And the great catharsis of the seventies will have been replaced by a somewhat higher view of our fellow man. Our national peculance over the fact that bigger no longer means better and that our every whim for the good life cannot be satisfied will have been replaced by a keener appreciation for our status in relation to the rest of mankind. In the process, the health professions will have ceased pretending, even to themselves, that what's best for the health professions is best for the country. Leadership of the health professions will have accepted the fact that the public will not automatically purchase the best they have to offer and that they do not have the sole prerogative of establishing the nation's goals in health.

Of the special interest groups of today, I have observed none which are more narrow in their view and self-serving in their efforts than we in the health professions. Under the thinly veiled guise of championing the cause of "quality health care for the public," we seek preservation of the status quo or only those changes which are congenial to our favored status.

In our individual conservatism, we acknowledge that this nation must balance its budget if we are to preserve our society. Yet, collectively, health professionals cry for unlimited and totally unrealistic federal expenditures on behalf of our educational and service programs. I suggest to you that this strategy is not now in anyone's best interest and will lead us to a less satisfactory future.

I make a plea for the demonstration of statesmanship on the part of all the health professions. We must encourage the development of leadership in and among our professions. Leadership which will provide guidance for the future — responsive to both our professions and the public we serve.

CONCLUSIONS

Challenges of unusual dimension and magnitude face the health profession, our organized leadership, and our educational components. Our collective best effort by no means assures an outcome which will be ideal; however, no profession can prosper or achieve its high purposes in isolation. Each profession has a stake in the future of the other professions, since all will share a common fate. A lesson yet to be learned is how to plan and work together more effectively.

The health professions and the multiple components of which they are composed constitute an exceedingly complex social system. As is to be expected, almost everyone in the system has a rather firm idea of how everyone else ought to behave. As we plan for the future, we must resist getting caught in what Gardner described as the crossfire between unloving critics and uncritical lovers. The destructive influence of the former is no more serious than the stagnating influence of the latter.

ALM/jj
April 28, 1977

31 January 1979

Management Worksnop

Lake Lanier, Georgia

THE EYE INSTITUTE AND THE THIRD PARTY MARKET

At least six months prior to the opening of The Eye Institute in January 1978, a comprehensive and detailed marketing program had been written. Known as our "Practice Development Plan," it analyzed the characteristics of the market for eye care, defined the "product" needed to serve the needs of the market, proposed the means of introducing the new facility to the community, and elaborated on approaches to the various population segments indentified as prime marketing targets.

In refining the Practice Development Plan during the period leading to our opening and just after, we prioritized our approaches to these market segments. The populations covered by third party insurors and other intermediaries, or which could be so covered, were chosen to receive our strongest promotional efforts. The reasons were obvious: this pool of potential patients was one that could be reached most cost-effectively in terms of expenditure of resources, and which might be expected to respond most favorably because the fee-for-service constraint had been removed from their access to eye care. We believed that successful penetration of this market would assure adequate utilization of our new, greatly enlarged facilities, in the shortest time.

In accordance with our plan, we designed a group eye care program. Our program extended the usual benefits by offering our unique capabilities in providing total eye care. We had an attractive descriptive brochure printed, retained a consultant with long experience and broad contacts in this area, and began to market Eye Institute Eye Care Programs.

We were almost immediately successful in uncovering a rich vein of interest. Health and welfare funds which were dissatisfied with existing vision care plans, or those who had limited money to expend on such benefits, were particularly interested in The Eye Institute as a sole provider resource. Among the reasons for this was our ability to offer a choice of many doctors, all located at our modern facility, under centralized discipline, and closely quality controlled. Another advantage we offered was the avoidance of fragmentation of eye care; services of optometrists, ophthalmologists and opticians, all working within a protocol structured to assure cooperation, proved to be an attractive sales inducement.

Within several weeks, two contracts with union health/welfare funds had been executed, with another pending. These would have secured more than a thousand primary care patients per year for The Eye Institute. However, at this point it was made clear to us that in addressing ourselves to the population covered by third parties we were in direct conflict with the interests of the local privately practicing optometrist. Furthermore, we were competing directly with Vision Service Plan of Pennsylvania, which is an organization that markets and administrates vision care plans. VSP, as it is known, is sponsored and directed by its participating providers.

When the strong objections from the private sector became known to our College's Board of Trustees, it was their decision that it was prudent not to fulfill the terms of the existing contracts or to further implement our marketing plan in this area.

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Subsequently, we applied for membership and became the first institutional eye care provider within Vision Service Plan of Pennsylvania. The by-laws of VSP forbid any participating provider from engaging in any activity that could be construed as attempting to gain competitive advantage over fellow providers. The only promotional exposure to the beneficiary population is a listing in a directory of participating doctors.

While our ability to market third party plans independently was terminated, we were assured that sales representatives of Vision Service Plan would inform their contacts that The Eye Institute was prepared to serve as a single source of eye care services, if VSP's open panel plan was unacceptable. On the other hand, The Eye Institute is obligated to turn over to VSP any viable sales lead it may generate. We are prohibited from signing any agreement to become an exclusive provider for any group, unless that group first refuses to purchase a VSP program. Consequently, our progress in realizing the potential of this market is minimal.

At the present time, The Eye Institute participates on the same basis as any privately-practicing professional in all operational Third Party Vision Care Plans, including these sponsored by Metropolitan Insurance Company, Blue Shield and ACT (formerly Pharmaceutical Card System). We are a referral resource for two Federally-qualified HMO's in the Philadelphia area, namely, the Health Maintenance Organization of Pennsylvania (HMO-PA) and the Health Service Plan of Pennsylvania (HSP). We accept assignment from all third party payors allowing that option, including Medicaid, Medicare and private insurors.

As you might assume from the prohibitions against any aggressive marketing activity in this area, our utilization by the private, prepaid, plan-eligible population is quite small; it accounts for less than 5 % of our patient census. In contrast, Medicaid-eligible patients -- which in

Pennsylvania is not an economically attractive patient segment to the private practitioner -- comprise approximately 35% of our practice.

We still believe a need exists for an institutional provider plan such as The Eye Institute can offer. However, our ability to tap this demand is limited by the constraints to our approaches to this highly specialized market. Our efforts in the near future may include utilizing the services of brokers of health and welfare benefit plans to represent us. In the interim, our decision to assume a non-competitive stance with respect to the private sector has proven to be a great handicap to our penetration of this market.

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Charles F. Mullen, O.D.
Executive Director
The Eye Institute of the
Pennsylvania College of Optometry
1201 W. Spencer Street
Philadelphia, Pennsylvania 19141

Module 4

Presenter: Jacques Krasny

Thursday, February 1, 1979

Zero-based budgeting (ZBB) may in many cases not be relevant to the needs of service organizations, such as hospitals, educational institutions, or government regulatory agencies. This is particularly true of "overhead" type units. Factor Value Analysis, (FVA) as discussed here, provides, a mechanism for dealing with overhead cost containment on a far less involved basis than ZBB. It was felt that with modifications, FVA would probably have good applicability to all the schools of Optometry and Podiatry.

2

Functional Value Analysis: A Technique for Reducing Hospital Overhead Costs

James E. Bennett

and

Jacques Krasny

Topics in this chapter include:

OVERHEAD: FIRST TARGET FOR COST CONTAINMENT
FVA: AN EFFECTIVE TECHNIQUE
PHASE I: GETTING FVA UNDERWAY
PHASE II: CARRYING OUT THE PROCESS
WHETHER TO UNDERTAKE FVA

Many administrators feel that the methodology suggested for functional value analysis could beneficially be applied to many aspects of hospital administration beyond overhead functions. Some base their comments on their own experience in applying approaches similar to FVA to non-overhead activities. Others—who have not yet used a similar technique—believe that FVA's discipline in methodology and in-depth participation of hospital personnel could produce results in areas such as radiology, laboratory, and nursing.

IN THE LAST several years, both policy makers and providers of service in the health care field in North America have increasingly faced the problem of balancing a seemingly infinite demand for care with limited financial resources. Hospital budgets—as the largest (50 percent) and fastest growing (13 to 15 percent annually) component of total health care costs—have felt the pressure most directly, particularly in Canada where provincial governments have imposed stiff restrictions on growth in funds for existing activities and have cut back expenditures on new services.

While few American hospitals outside the Veterans Administration and military health systems may have yet felt the squeeze, the betting is that they soon enough will. For example, policy advisors to President Carter seem to believe that a move to some form of national health insurance must be accompanied by a vigorous cost containment program, which—several have urged—should include the prospective reimbursement of hospitals under a federally mandated scheme operated through commissions established by state legislation.

Thus, pressure on hospital budgets seems to be a matter of "when" rather than "whether." How, then, can hospital administrators in both Canada and the United States meet growing patient needs with increasingly less incremental money? Surely, before reducing individual services or taking steps to cut the

In the course of preparing this article, we solicited and received a great deal of valuable critique and input from hospital and health care administrators. We gratefully acknowledge this assistance.

overall utilization, an administrator should tackle non-medical "overhead" costs, which typically account for 30 to 50 percent of the hospital's annual operating expenditures.

In this article we describe how to launch such an attack through functional value analysis (FVA), a technique developed and proven in industry to achieve lasting 15 to 20 percent reductions in overheads. In FVA, total non-medical expenses are broken down into cost centers with budgets of not more than $500,000. A full-time task force assists the head of each such "unit" in going through a disciplined, analytical, and idea-generating process that must result in identification of a 30 to 40 percent saving. Cost reduction ideas are then evaluated by all managers who "consume" the unit's services, and finally, senior hospital management chooses the ones that will be implemented. From beginning to end, the process takes some four to six months.

In the remainder of this article we briefly outline why non-medical costs should be top priority for attention and why FVA is likely to be successful. The article then describes how FVA is organized and carried out, and concludes with several questions to help administrators decide whether the technique is "right" for their hospitals.

OVERHEAD: FIRST TARGET FOR COST CONTAINMENT

As administrators are well aware, the most effective way to contain hospital costs is to cut back a particular service or reduce the overall utilization of the institution. Thus, significant savings can result if maternity services are eliminated or if the hours of outpatient clinics are substantially curtailed—provided that the hospital's manpower is reduced by the equivalent of most of the staff who worked in those areas. Similarly, a cooperative effort between the administrative and medical staffs to reduce average length of stay can produce substantial savings, but only if the freed-up beds are closed; otherwise, more patients will be admitted and total costs will *rise* due to the greater medical expenses incurred in the first days of a patient's stay.

As administrators are well aware, the most effective way to contain hospital costs is to cut back a particular service or reduce the overall utilization of the institution.

Clearly, these types of actions most directly hurt the very individuals an institution is in business to serve: the patients in its community. Even if skillfully handled they are likely to arouse intense and emotional opposition from hospital employees—particularly the medical staff. Thus, it seems apparent that containing expenditures by eliminating services or reducing overall utilization should be pursued only after all other reasonable avenues have been exploited. Such an avenue is non-medical costs, or what might be termed hospital "overhead."

Overhead is a substantial component of total operating expenditures. For

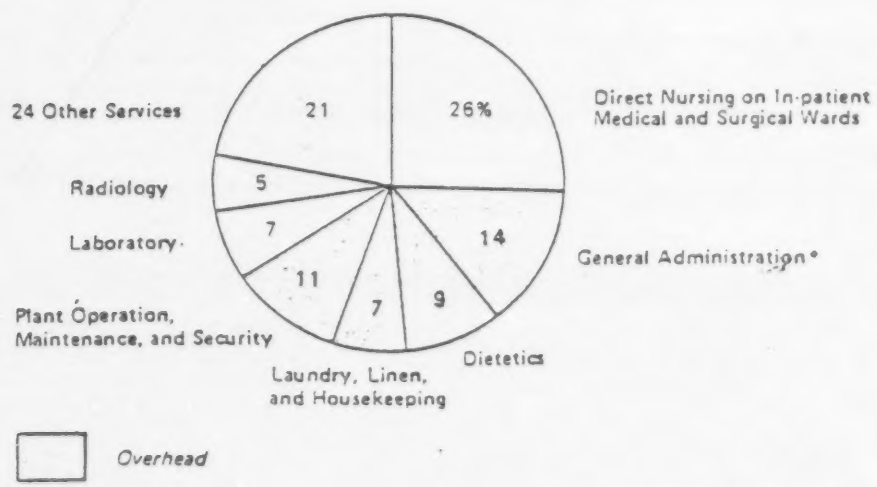
example, an examination of the cost structure of 230 hospitals in Ontario shows that of the seven expense categories that make up more than three-quarters of costs, four are basically non-medical: building operations, housekeeping, dietetics, and general administration (Figure 2-1). If the purely administrative components of nursing, laboratory, and radiology services were included, overhead in a large Canadian hospital could range from 30 percent to 50 percent of total operating expenditures. And, while the precise figures might vary in American hospitals, the proportions—excluding physicians' salaries—appear to be essentially similar.

Unlike other services, these overhead components—with the possible exception of dietetics—have little impact on the quantity and quality of *medical* care available to the institution's patients. Housekeeping may have some effect on a patient's comfort and convenience, but building operations and general administration seldom impinge on the patient during his stay in the hospital.

Then, if expenditures must be contained, these non-medical, overhead costs should be the first place to look. Before taking the harsh step of cutting services, the prudent hospital administrator will ensure that the expenses of functions like housekeeping have been pruned to the limit.

FIGURE 2-1. ONTARIO PUBLIC GENERAL AND ALLIED SPECIAL HOSPITALS *(TOTAL EXPENDITURES* = 100 PERCENT)

(Total expenditures = 100 percent)



* – *In Canada, this category usually includes employee fringe benefits for the entire hospital. These would have to be allocated to other categories to reflect a fully accurate cost breakdown.*

FVA: AN EFFECTIVE TECHNIQUE

In undertaking the pruning job, the administrator has a range of choices. At the one extreme, he can wield a hatchet—for example, by requiring each overhead function to cut its budget by an arbitrarily decided percentage. While this approach may achieve results in a hurry, savings rarely last because the type and volume of work to be done does not really change; moreover, the wrong areas may be cut, genuine opportunities missed, and staff morale damaged in the process.

At the other extreme, the administrator and his immediate staff can undertake an exhaustive review of all the work performed, and then modify some tasks or eliminate others. Although this might yield lasting savings, seldom is the necessary time available.

Functional value analysis is between these two extremes, but somewhat closer to the latter. Having been developed in private industry, FVA combines comprehensiveness with the sense of urgency imposed by the need to achieve rapid results. In the industrial context, the technique is a proven performer. Over 50 major companies in nearly every type of business have achieved lasting savings as high as 20 percent of overhead—which would be the equivalent of roughly $2 million annually in a large hospital with a $30 million operating budget.

Although FVA is not yet fully tested in hospitals, the features that have made it effective in industry point to success in the hospital context:

1. **Discipline:** As will become clear later in this article, FVA is a systematic and carefully programmed review of *all* the activities and "end products" produced by overhead units within the scope of the examination. Thus, FVA enables management to overcome the fact that there are few "big ticket" items that can result in easy cost reductions, and to come to grips with the countless individual tasks that together result in substantial overhead expense. Moreover, the disciplined review invariably reveals a high proportion of resources that are being devoted to comparatively unimportant tasks or are producing limited results.
2. **Involvement:** FVA is carried out by the down-the-line professionals who actually run the operation. With guidance from a task force, they are the ones who identify the cost of each end product, and who generate ideas on how the same or better results can be achieved less expensively. Industry has found that this in-depth involvement leads to savings that last, both because changes are practical and because the people in charge are committed to implementing them. This should be particularly the case in the hospital setting, where much of the work is highly specialized and is managed by professionals who are suspicious—often rightfully—of attempts to intrude on their jurisdiction.
3. **Imagination:** In carrying out FVA, down-the-line people are asked to

identify savings opportunities that add up to a very challenging target—typically 40 percent of budget. Even though implementation generally goes no further than half of this amount, managers and their subordinates are required to use all their ingenuity and imagination in generating ideas to meet the target. Through this process, a surprising number of innovative cost-cutting approaches typically result.

Although these features of FVA originated in engineering disciplines and were then adapted to private industry, hospital personnel clearly possess all the prerequisites for applying the technique: dedication to professionalism, ingenuity, and the willingness to work hard.

PHASE I: GETTING FVA UNDERWAY

If a hospital is persuaded that functional value analysis makes sense, how should it actually use the technique? To begin with, FVA—like any major management undertaking—requires careful advance planning to be successful. Thus, Phase I of the effort should be devoted to four preparatory steps:

1. Deciding on the scope of the effort
2. Organizing the FVA team
3. Establishing the ground rules
4. Developing communications and manpower programs.

1. Deciding on Scope

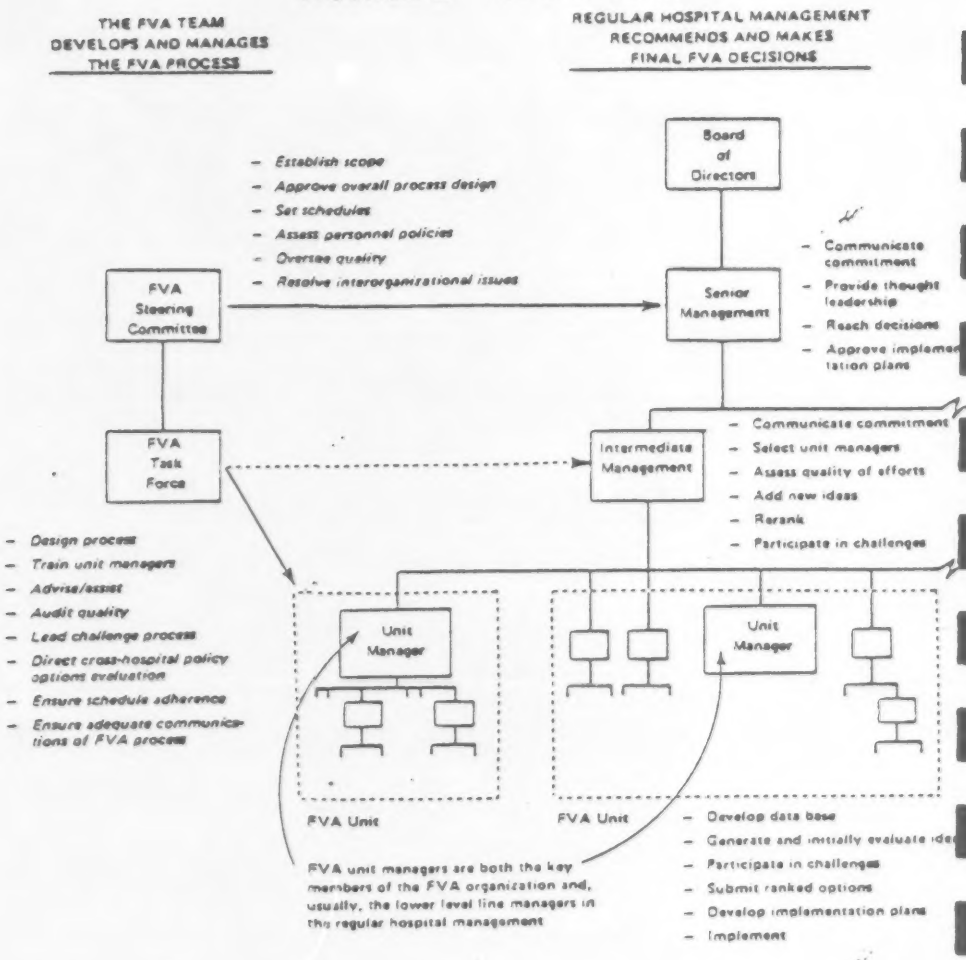
The first step is to decide which parts of the hospital budget will be considered as overhead expense and will thus be included in the analysis. As a starting point, it seems reasonable that all of the "hotel" components of the hospital should be included: dietetics, housekeeping, and plant operations. General administration would also be a prime candidate, including some medical support activities such as records. At the judgment of the executive director, the administrative component of the more directly medical functions such as nursing, laboratory, and radiology services might be involved as well. Indeed, the going-in premise should be that a unit ought to be included if it is more likely to benefit from a systematic self-examination of costs than to suffer from the inconvenience of undergoing the process.

2. Organizing the Team

The FVA "team" has three principal parts: unit managers, a task force, and a steering committee. Almost all of the members of this team are regular line management of the hospital who take on extra FVA functions for the duration of the process. In their FVA capacities these individuals direct, monitor, or actually carry out the generating and evaluation of cost reduction ideas. However, decisions as to what will be implemented and how it will be done are made by the normal chain of command of the institution. Figure 2-2 illustrates the way in which the relationships of the FVA team and line management interlock.

The unit managers—who spend from five to 40 percent of their time on FVA—are the most important

FIGURE 2-2. THE FVA TEAM


THE FVA TEAM DEVELOPS AND MANAGES THE FVA PROCESS
REGULAR HOSPITAL MANAGEMENT RECOMMENDS AND MAKES FINAL FVA DECISIONS
Board of Directors
– Establish scope
– Approve overall process design
– Set schedules
– Assess personnel policies
– Oversee quality
– Resolve interorganizational issues
FVA Steering Committee
Senior Management
– Communicate commitment
– Provide thought leadership
– Reach decisions
– Approve implementation plans
FVA Task Force
Intermediate Management
– Communicate commitment
– Select unit managers
– Assess quality of efforts
– Add new ideas
– Rerank
– Participate in challenges
– Design process
– Train unit managers
– Advise/assist
– Audit quality
– Lead challenge process
– Direct cross-hospital policy options evaluation
– Ensure schedule adherence
– Ensure adequate communications of FVA process
Unit Manager
Unit Manager
FVA Unit
FVA Unit
FVA unit managers are both the key members of the FVA organization and, usually, the lower level line managers in the regular hospital management
– Develop data base
– Generate and initially evaluate ide
– Participate in challenges
– Submit ranked options
– Develop implementation plans
– Implement

component of the team. Because of their thorough knowledge of the operations of their unit, they must be the ones to organize the cost data, generate the savings ideas, and take the lead in assessing their feasibility. As a selection criterion, each unit manager should be regarded as the obvious leader of the unit by his peers and subordinates, and should have ten to 30 subordinates with a budget of no more then $500,000. The quality of overall effort is primarily a factor of th quality of work done by these people.

Next, the full-time task force sho be selected, with a rule of thumb bein one task force member for every five t ten unit managers. In practical ter this will mean a task force of four to

Because of their thorough knowledge of the operations of their unit, unit managers must be the ones to organize the cost data, generate the savings ideas, and take the lead in assessing their feasibility.

people in a large hospital. The function of the task force members is first to tailor FVA to the specific needs of the institution. Then they must teach the necessary analytical techniques to the unit managers and, in a consultative capacity, assist them in carrying out the process. Finally, the task force maintains the discipline of FVA, by stressing adherence to deadlines and thoroughness of work. To ensure a balanced perspective in carrying out these functions, the task force might well include at least one physician and one senior nurse, in addition to administrative personnel.

Finally, a four or five member FVA steering committee and a chairman should be appointed from among the senior management of the hospital. This group is accountable to their colleagues as well as to the board of directors for the success of the overall program. In addition, they are charged with making any FVA process decisions—such as which departments should or should not be included and how much time should be allowed for completion. In a large hospital, the FVA steering committee could be formulated in the same manner as most *ad hoc* project committees. In a smaller institution, the regular management group could, as a whole, take on this extra responsibility. The actual work load for this group is typically quite light—but they are an essential requirement for successful FVA.

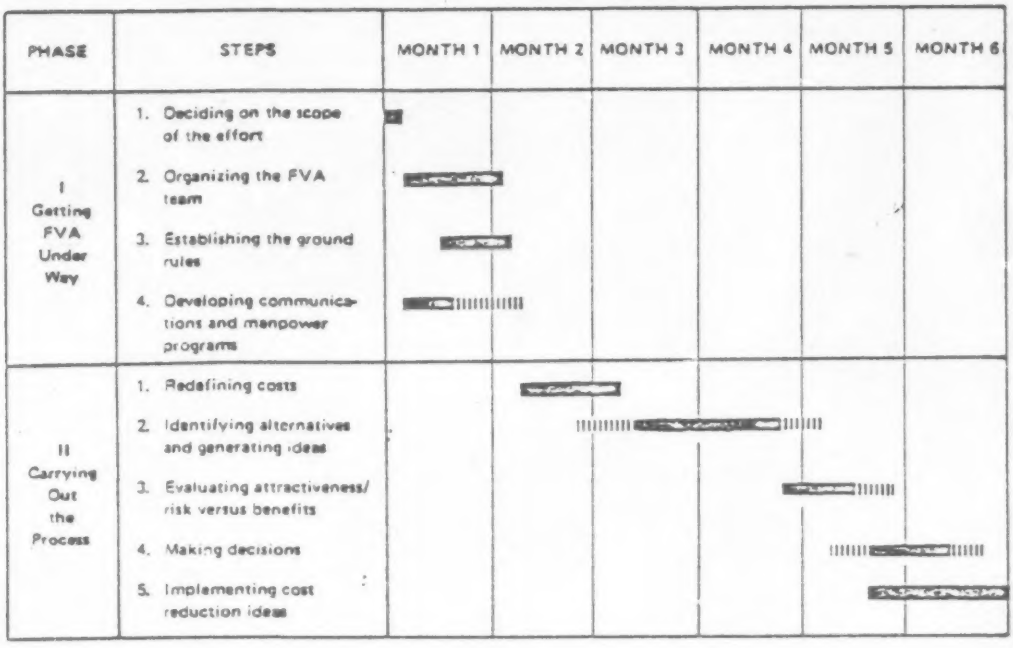
The task force can and should effectively administer the program, but unless a high level body actually "owns" and is responsible for FVA, there is a real risk of floundering and not getting the best possible results for the effort.

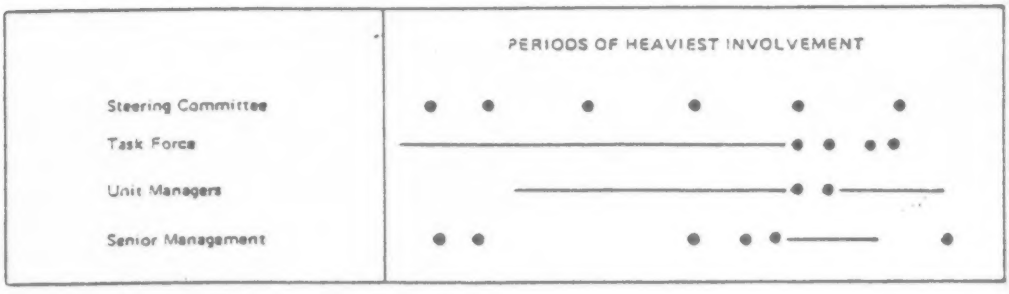
3. Establishing The Ground Rules

Once the FVA organization is in place, some ground rules for carrying out the analysis should be set. To begin with, each unit that will undergo FVA must be assigned a "stretch target"—that is, a percentage of its gross budget that becomes the target total of all its cost reduction ideas. As noted earlier, the purpose of this number is to stretch the thinking of unit managers and make sure that all good ideas are brought forward and discussed. The target that has usually been used in industry is 40 percent. In the hospital environment, this might be divided into 20 percent that could be implemented immediately, and an additional 20 percent that would substantially reduce the unit, but still permit it to continue its core functions.

In addition, because a key aspect of FVA is discipline, a rigorous timetable should be established for the completion of each of the analytical and decision-making steps that make up Phase II. Typically, the total FVA process takes four to six months (Figure 2-3). If necessary, it can either be done more

FIGURE 2-3. A ROUGH SCHEDULE FOR FVA





quickly or can be extended to accommodate vacations or unusually heavy work loads. As in every other aspect of the process, the timing should be tailored to the needs and limitations of the individual hospital.

4. Developing Communications And Manpower Programs

Before FVA is launched, hospital management should develop a communications program to protect the interests

of the institution. For example, any senior administrative personnel and professional staff who were not part of the decision to undertake FVA should be sold on its needs and merits. In addition, the technique and timetable should be explained to the rest of the management and professional staff, and then management's intentions should be explained to union leaders—with the aim of gaining their understanding and, ideally, their cooperation. A complete communications program should also cover special interest groups, and should include contingency plans for explaining the effort to the community, should the need arise.

Perhaps the most critical preplanning step is the formulation of a manpower program. Because some two-thirds of hospital operating costs are personnel-related, achieving meaningful savings will at some point require manpower reductions. Given the relatively high turnover in many employee categories, it should be possible to capture most of these reductions in a reasonable time period through attrition. Nonetheless, it may be prudent to develop plans for reassigning personnel whose activities have been altered or eliminated, and it may be important to establish a program for accelerating attrition through such measures as special early retirement benefits. Further, in some hospitals, management might decide that the need for quick savings requires layoffs. If so, special severance benefits or relocation assistance may be needed. Whatever form the manpower program takes, however, management should think through the likely union reaction and prepare a labor relations strategy accordingly.

PHASE II: CARRYING OUT THE PROCESS

Once the appropriate groundwork has been laid, the hospital can get on with the job of carrying out the five main FVA steps that lead to lasting cost reductions:

1. Redefining costs.
2. Generating cost reduction ideas.
3. Evaluating attractiveness—risk versus savings.
4. Making decisions.
5. Implementing ideas.

While outside consultants can be invited to assist in all five steps, their role should be primarily one of guidance and quality control of the overall process. Indeed, the success of FVA depends on the extent to which the institution's own managers assume responsibility for the effort.

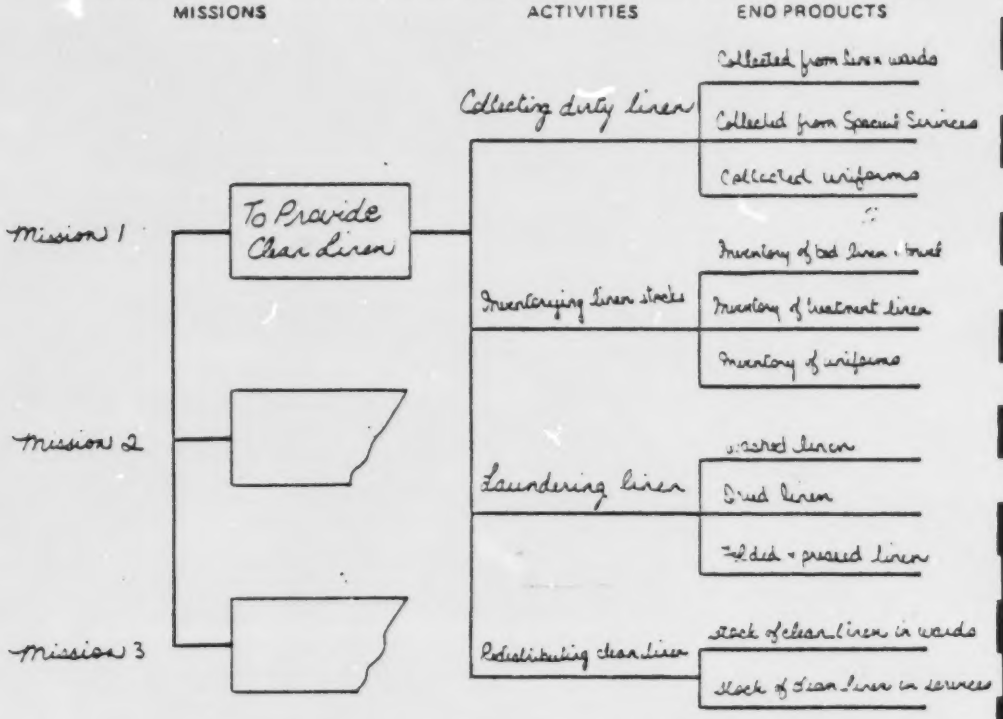
1. Redefining Costs

In the first step of the FVA analytical process, each unit manager carefully analyzes exactly what his unit produces or does for the other parts of the hospital and determines how much this costs.

ANALYSIS OF FUNCTION

The analysis begins with the development of a three part "function tree" for each unit. As Figure 2-4 illustrates, a function tree should start with the basic missions of the unit. These are the reasons—usually few in number—that explain the "why" of the department.

FIGURE 2-4. THE FVA FUNCTION TREE—A SIMPLIFIED EXAMPLE



Some examples are: "to provide clean linen"; "to maintain hospital accounts"; "to maintain building security"; "to maintain medical records." Stemming directly from the mission are activities—for example, the activities supporting the mission "to provide clean linen" might include:

- Collecting dirty linen.
- Inventorying linen stocks.
- Laundering dirty linen.
- Redistributing clean linen to wards and services.
- Purchasing new linen as required.

The third element of a function tree is the end products and services of the unit, which can usually be stated as nouns or noun phrases. In some cases, they may be physical goods such as "clean linen" or "the clean linen inventory." In others, they may be more conceptual—for example, "tight building security" or "control of records." Once completed, the function tree provides a clear picture of what the particular unit is all about: a concise description of its missions, of its activities, and of the end products and services it produces.

DETERMINING COST OF OPERATION

With this picture in hand, the unit manager goes on to determine how much

his operation is costing the hospital—both in total and for each activity and end product or service. To determine the total, he first develops a "base line budget" for the unit. This budget should include the salaries and benefits of employees whose time is completely dedicated to the unit, as well as the cost of supplies the unit itself consumes. In addition, the base line budget must include an estimate of the resources indirectly used by the unit, such as the cost of floor space, utilities, and general building services. Most American hospitals should find this allocation relatively straightforward, as they are accustomed to tracking indirect cost by service as a basis for determining patient charges. Although Canadian hospitals seldom assign indirect costs on this basis, the FVA task force and the unit managers should be able to develop rules of thumb that will enable at least an approximate allocation to be made without too much difficulty.

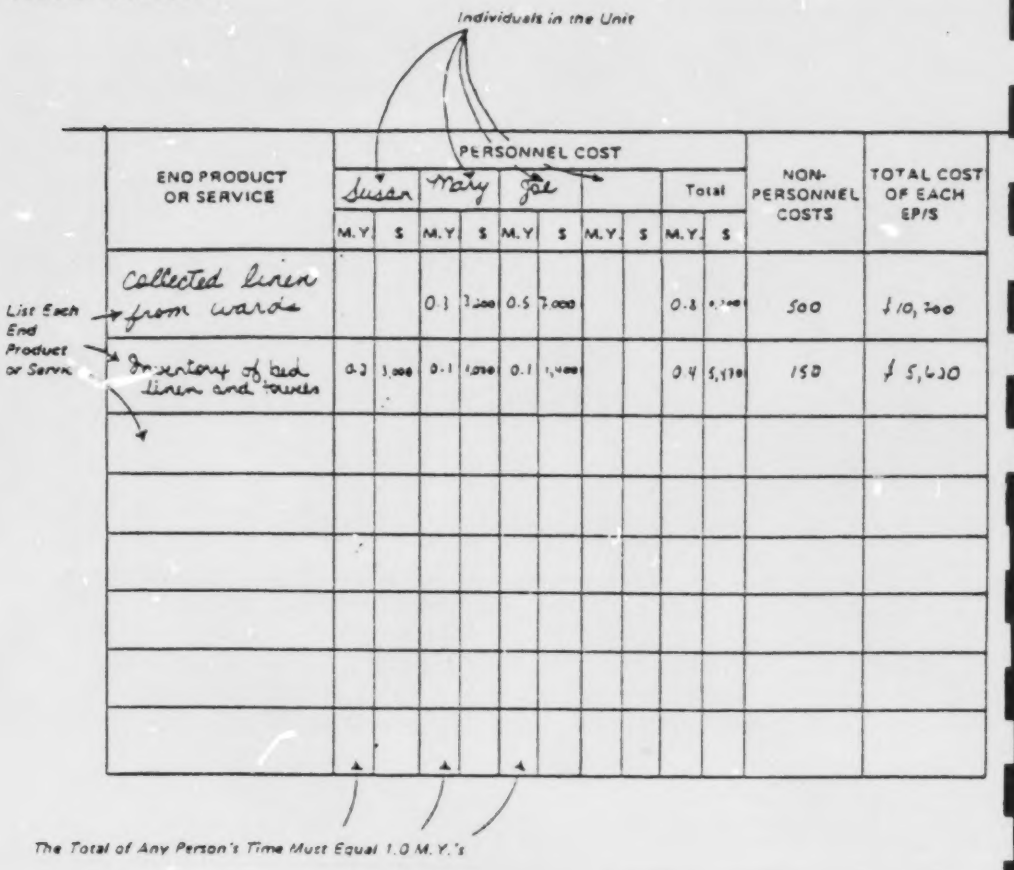
This approach will mean that the arithmetic total of the base line budgets of all FVA units will be substantially greater than their total current operating expenditures, because of double counting of some cost elements. For example, if base line budgets are developed properly, a dietetics department will include laundry as a cost of its meal service, while the housekeeping unit will show laundering expense as one of the elements in its base line budget. This method of double and frequently triple counting goes a long way toward helping the unit managers understand how much the services they provide actually cost the hospital. Also, the more angles from which a particular cost element is viewed, the greater are the chances of coming up with useful cost reduction ideas.

With the base line budget nailed down, the unit manager must then allocate it against all the end products he has defined. Because this is intended to be an exercise in judgment, rather than advanced accounting, accuracy of plus or minus 15 percent is quite acceptable. To avoid unnecessary detail, a useful rule of thumb is that no end product or service should be smaller than $2,000 or one-tenth of a man-year. The actual allocation can be accomplished by creating a work sheet that arrays all the end products and services down one axis, and all the cost elements of the department (individual employees and non-personnel costs) across the other axis (Figure 2-5). This approach ensures that all the expenses of the unit are accounted for, and it also enables individuals to be involved in deciding how their own time is allocated to the various end products or services that are produced.

2. Generating Ideas

Once costs have been redefined for all units, the next step is to think about ways in which each expense component could be reduced or eliminated. This second step is the heart of FVA, and the overall effectiveness of the technique depends on how thoroughly and creatively it is carried out. The key, of course, is to work with the data base developed in the previous step—which may already have

FIGURE 2-5. FVA RESOURCE ALLOCATION WORKSHEET—A SIMPLIFIED ILLUSTRATION



Note: *M.Y. = the fraction of the man-year spent on the end product*
$ = the dollar value (based on salary plus fringes) of the time spent

generated a number of likely opportunities.

Here, the task force plays a major role, as it has the responsibility of designing for each unit manager the best method of generating cost reduction ideas. "Think sessions" are most frequently used in industry, but other methods—such as consultation with peers in other hospitals—should be used as a supplement wherever they seem likely to yield promising suggestions.

In any event, there should be at least one "think session" for each unit manager. The people who attend should be carefully chosen to make sure that as

many ideas as possible are generated and discussed. At a minimum, this would include the unit manager and his one or two most trusted lieutenants. In addition, at least one task force member should attend, along with any expert either from within or outside the hospital who has something to contribute. For example, an individual from a hotel chain might usefully participate in housekeeping-related sessions, and someone from industry who is familiar with scheduling techniques might provide valuable input to cost reduction ideas related to housekeeping and maintenance schedules.

This work group should look at each end product or service of the unit in turn, and first consider each of the following possibilities to reduce "demand" for the service:

- Reduction in amount, frequency, or quality.
- Outright elimination.
- Combination with another activity.
- Deferral to a latter point in time.

In addition, consideration should be given to automation (or deautomation), to having the work load rebalanced, and to changing the work flow entirely. For example, if "hospital security" is the end product being considered, ideas might involve switching partially to electronic devices, closing or converting some doors to "one way only," getting local police to regularly patrol hospital grounds, asking the taxi dispatcher at the front door to perform some security duties, arranging for volunteer groups to perform some security functions, and so on. Similarly, Figure 2-6 illustrates several ideas that might be applicable to the end product "collected linen." Regardless of the end product or service, all ideas should be considered no matter how implausible they may seem at first. Frequently, those that are unthinkable on first examination can be modified to be more realistic, and ultimately result in significant expense reductions.

Regardless of the end product or service, all ideas should be considered no matter how implausible they may seem at first. Frequently, those that are unthinkable on first examination can be modified to be more realistic, and ultimately result in significant expense reductions.

At this point in the FVA process, the predetermined "stretch target" becomes an important element. The unit manager and his colleagues cannot declare peace on Step 2 until they come up with cost reduction ideas, the total value of which is equal to the target percentage of their base line budget—usually the 40 percent. Again, while it is unlikely that this fraction of any unit can or should be eliminated, every attempt should be made to reach the figure, since only with this challenge will every opportunity be identified for examination. For this reason, individual units should be given relief from the target in only the most extenuating circumstances—and then, only with the agreement of the FVA steering committee.

FIGURE 2-6. IDEA GENERATION WORKSHEET—A SIMPLIFIED ILLUSTRATION

ACTIVITY																					
		DEMAND REDUCTION							STREAMLINING							OTHER					
			REDUCE																		
END PRODUCTS AND SERVICES	DOLLAR EXPENDITURE	Amount	Frequency	Quality	Eliminate	Combine/substitute	Other	Combine	Automate	Organize	Balance workload	Change sequence of activities	Increase skill level	Decrease skill level	Make or buy						
Collect linen	$10,700		1	2		3	4		5		6										

1. Collect linen only once per day.
2. Don't sort linen at the wards.
3. Collect linen and dirty dishes at the same time.
4. Collect linen only as new linen is needed and delivered.
5. Install linen sheets
6. Have ward orderly prepare linen for collection.

3. *Evaluating Attractiveness*

In Step 3, line management—with the help of the task force—evaluates the many ideas that have been generated. In essence, for each idea this means weighing up the potential dollar savings against the many kinds of risks involved. First, an approximate (plus or minus 15 percent) savings figure is put against the idea. Then, risk is assessed in three stages: first, the types and severity of consequences are considered; second, and independently, the probability of their occurrence is estimated; and finally, these two factors are combined to assess the total risk incurred.

In assessing the severity of adverse consequences, the first consideration should, of course, be any impact on the

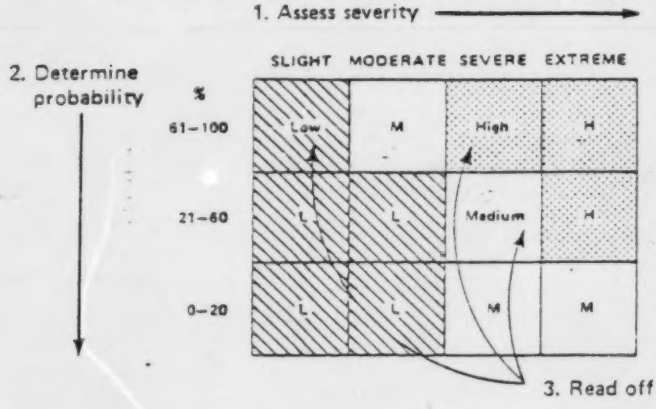
comfort or convenience of patients: for example, eliminating a snack may be felt to be a significant inconvenience. Beyond this, the effect on staff morale or professional competence must also be assessed. Finally, adverse consequences of a financial nature could be involved, in that a small saving could lead in the long term to a substantial net expense. When these types of consequences appear to be unacceptable, a unit manager should evaluate whether corrective action could be taken or the change reversed if the consequence were in fact to occur. Taking all these factors into account, then, he must rate the severity of risk of each idea as being slight, moderate, severe, or extreme.

Quite separate from the severity of an adverse consequence is the likelihood of its occurrence. For example, while eliminating one security guard might increase the risk of an extensive fire, the probability of such an event is relatively low. The unit manager must make a similar judgment as to the likelihood of occurrence of the adverse consequences he has identified for each idea, using three broad bands of probability: low (zero to 20 percent), medium (21 to 60 percent), or high (61 to 100 percent).

The assessments of both severity and probability are then combined by using a three-by-four matrix as illustrated in Figure 2-7. For ideas that fall into the high risk category, the unit manager should search for ways to reduce either the severity or likelihood—even if that means foregoing some portion of the potential savings.

Finally, this overall assessment of risk can be combined with the estimated potential savings, to form an overall attractiveness score (Figure 2-8). In this way, each cost reduction opportunity can be ranked from the most attractive (high potential saving, low risk—Code A) to the least attractive (low saving, high risk—Code I). This overall attractiveness ranking permits the comparison of all the ideas from all the FVA units. For example, an A-rated idea from one part of the organization should be more attractive than a C-rated idea from

FIGURE 2-7. A MATRIX FOR DETERMINING THE RISK OF IDEAS

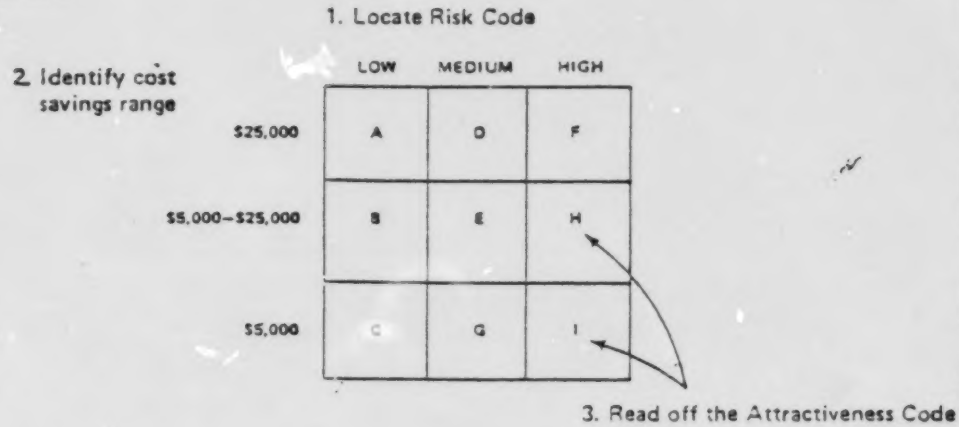


Severity indicates the degree to which the hospital could be adversely affected if a particular idea is implemented. For example, it might be assessed in four categories:

- Slight: negligible impact on operations
- Moderate: somewhat hinders successful operations
- Severe: significantly hinders successful operations
- Extreme: significantly impairs patient treatment

For example: *A moderately severe adverse consequence with a 50% probability of occurrence would have a 'low' risk rating*

FIGURE 2-8. A MATRIX FOR DETERMINING THE ATTRACTIVENESS OF IDEAS



another. A single form (Figure 2-9) is then used to summarize and describe the opportunity, to provide along with the attractiveness code a basis for decision by the FVA steering committee upon completion of Step 3 of the process.

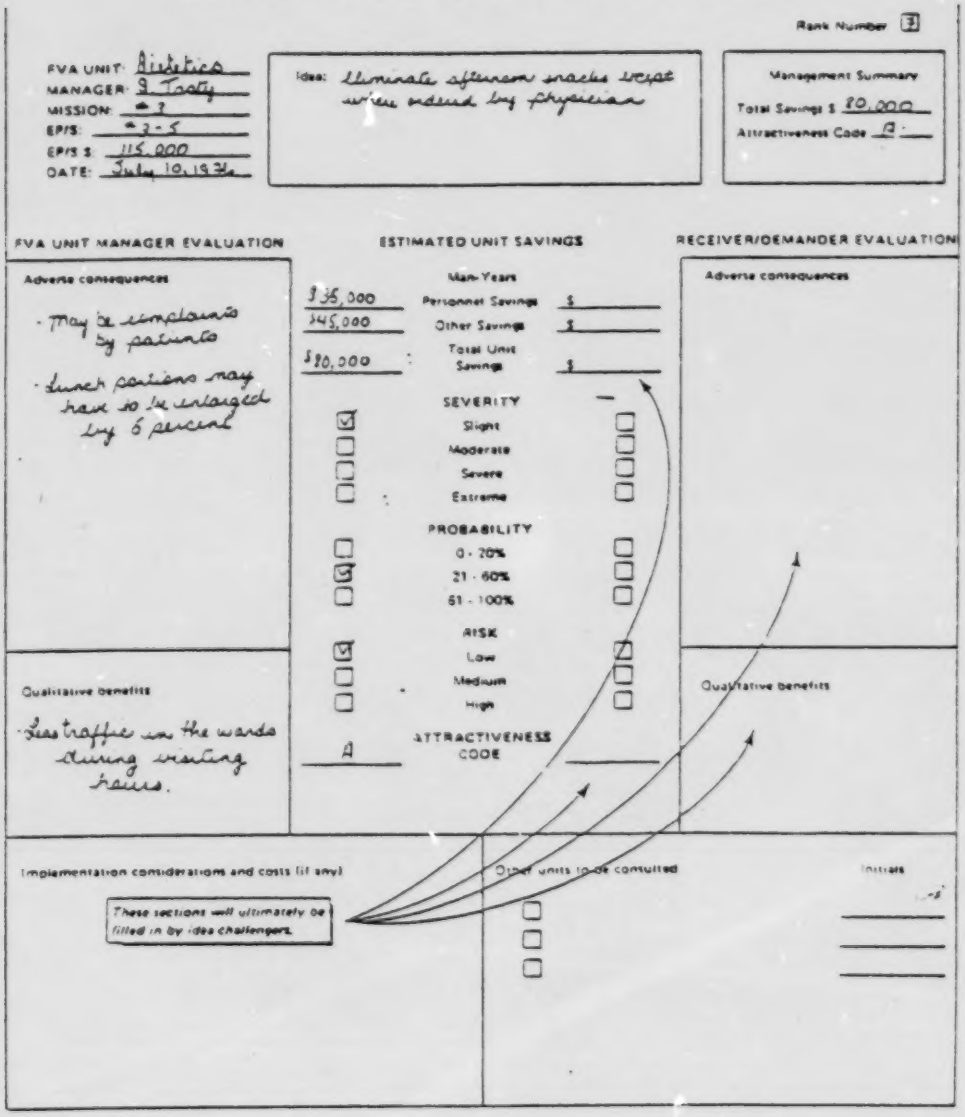
4. Making Decisions

The next step in FVA involves verifying that the judgments made about potential dollar savings and risk levels are sound, and then deciding which ideas—of all those identified by the individual FVA units—should in fact be implemented.

To verify the judgments, every cost reduction opportunity that involves a change in a service performed for hospital personnel outside the unit in question should undergo a challenge process. That is, the other units or individuals in the hospital who typically receive that service should have the chance to comment on the accuracy of the risk evaluation and to advise management of aspects of a particular idea that have not been adequately considered. Opportunities that are internal to the unit submitting them (typically streamlining ideas) do not usually need this challenge, but may be advisable nonetheless to obtain the reaction of the hospital's senior administrators in functions such as finance and personnel. In either event, the challenge process may well lead to changes in risk evaluations and savings estimates for individual cost reduction ideas.

With the analyses and recommendations of unit managers and the comments of the "challengers" in hand, senior management of the hospital decides which cost reduction opportunities will be implemented. They can elect to implement all those above a certain attractiveness level for every unit. Or they can seize the occasion to rethink the institution's overall priorities and substantially

FIGURE 2-9. COST-REDUCTION IDEA WORK SHEET



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With the analyses and recommendations of unit managers and the comments of the "challengers" in hand, senior management of the hospital decides which reduction opportunities will be implemented.

cut back one unit's budget (with, of course, a complete awareness of the risk involved) and increase that of another unit. Or they can make "reinvestment decisions" within a particular unit—taking suggested cost reduction moves and reinvesting the savings in another mission or activity within the same unit. No matter what course of action is finally decided upon, the FVA process should have ensured that it is based on a set of facts and analyses that reflects the realities of day to day operations.

5. Implementing Ideas

The final step of FVA is aimed at ensuring that the cost reduction ideas chosen by management are actually implemented and that estimated savings are in fact achieved. To begin with, management should ensure that every idea has one person assigned to its implementation. Generally, this assignment should be straightforward, since many ideas will have been generated by people who are well placed to carry them out. These individuals should be apprised of their responsibility and asked to develop an implementation plan describing how and when they will achieve the cost reduction objective. Periodic reviews to check progress are a useful forcing device for the individual, and also help to assure management that the projects are being carried out according to plan.

More broadly, a useful budgeting approach to facilitate implementation is the zero base technique. In zero base budgeting, managers develop and submit annual expense requests starting from a "zero" base, rather than from the previous year's expenses. Consequently, they must justify each cost component of their total resource package on its merits rather than merely arguing for a change from the previous year's costs. In practice, zero base budgeting is much like Phase I of FVA and can become a natural extension of the FVA process. The real benefit of this new budgeting method is that costs are aligned to end products and the reason for a change in expenses, as it happens during FVA implementation and on a year to year basis, is easily observable.

WHETHER TO UNDERTAKE FVA

In summary, FVA is a two-phased process, each with a number of carefully programmed sequential steps. While in industry the technique has been proven effective in achieving lasting reductions in overhead expense, much time and work will be required of personnel of an individual hospital to achieve similar results. In addition, since staff reductions will be required at some point—even if achieved through attrition—FVA is a politically challenging exercise. Thus, a

hospital probably ought not to undertake the process unless it can answer yes to at least two or three of the following questions.

Strong Need to Contain Costs?

The basic motivation for FVA must be a strong need to cut or contain costs, as too much effort is involved to warrant using the technique as an intellectual exercise. Moreover, since most of the work is done by unit managers, they must know of and agree with the cost containment need. It is in the minds of these key people that tough questions such as, "Do we really need this service at this level of quality?" and "How much is really being lost if we do away with that report?" must be answered. Frequently, FVA means they must recommend a reduction in their own department's size, responsibility, and possibly prestige. Obviously, to step up to this challenge, they must believe that the hospital really needs to cut costs.

Large Enough Hospital?

FVA, as described in this article, is a formal and complex process. A special organization is established, forms are designed, and a full-time task force is dedicated to the effort. Unless the institution is big enough to anticipate annually recurring savings that significantly outweigh the cost of the project, FVA is probably not warranted. As a rule of thumb, the full-blown effort is probably most appropriate in hospitals with annual operating budgets of $10 million or more, or where—using the norms noted earlier—the process could be expected to result in annual savings of at least $500,000.

FVA is flexible enough, however, to allow smaller institutions to gain some benefits from a modified version. With thoughtful adaptation, the five steps in Phase II could be collapsed into several intense working sessions. Or two or three small and geographically proximate hospitals could conduct a joint FVA program, sharing the full-time task force. Indeed, these hospitals should both expect and want to consider pooling and sharing some services (such as laundry), since this solution will almost inevitably be reached by a joint FVA task force. Yet another way for smaller hospitals to benefit is to wait until larger hospitals have completed FVA, and then explore the applicability of their cost reduction ideas.

Right Timing?

Some of the hospitals that are candidates for FVA have already undergone some of the more traditional types of cutbacks—"10 percent across-the-board" or "a freeze on all hiring." Often, this may mean that the work load is as heavy as ever but is assumed by fewer people. If this is the case, there is obviously a real danger of resentment and resistance to another cost-reduction effort, no matter how thoughtful. Because FVA relies primarily on the thoroughness and imagination of down-the-line hospital managers, this attitude can seriously jeopardize the success of the program, which may mean that the

timing is not yet right. If no such past history exists, the main point to be made is that FVA, while it may be unpleasant, is still the most sensible approach to cost reduction. Obviously, it would be wise to ensure that this opinion is widely held if a program is to be undertaken.

Implementation Possible?

Properly done, FVA will develop new and imaginative approaches to cutting costs. However—as mentioned several times earlier—reductions will be required at some point to convert potential savings into "real" dollars. Consequently, FVA should not be undertaken unless it is likely that these reductions can, in fact, be accomplished. Where collective agreements or other legal restrictions limit the hospital's ability to let people go, these considerations must be part of the decision to conduct an FVA program. Where the decision is made to reduce staff only through attrition, management must determine whether cost reductions will be achieved quickly enough to meet budget restrictions.

Industry has long had to cope with the realities of overhead cost pressures, since expense containment is one of the main factors in competitiveness and profitability. While hospitals have always had to live within budgets of a sort, there has seldom been a great sense of urgency to contain operating expenditures. However, the urgency is coming as both public and private sources of funds are increasingly forcing hospitals to do incrementally less resources in meeting essentially unlimited patient demand. Thus, the question may no longer be whether to contain costs, as much as "What should we do?" and "When should we do it?" Functional value analysis aimed at non-medical, overhead expense is a partial answer to the "how" question. Hospital management must answer the "when."

Management Workshop For Institutional

Administrators In Optometric And

Podiatric Medical Education

FUNCTIONAL VALUE ANALYSIS

Atlanta

February 1, 1979

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McKinsey & Company

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Arch B. Edwards
McKinsey & Company
1700 Pennsylvania Avenue, N.W.
Suite 400
Washington, D.C. 20006

Telephone: (202) 393-6820

or

Jacques Krasny
McKinsey & Company
80 Bloor Street West
Toronto, Ontario, Canada
M5S 2V1

Telephone: (416) 922-2200

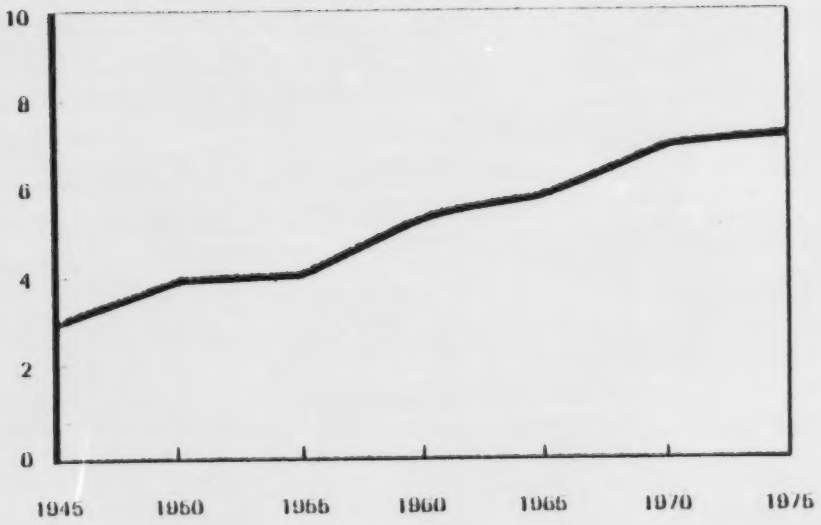
BACKGROUND (Using Canada as an example)

Financial pressures will not abate

- Health care is claiming an increasing proportion of the economy
- Funders of health care are caught in a revenue/expenditure squeeze
- The major factors causing the cost pressure will get more intense in the future

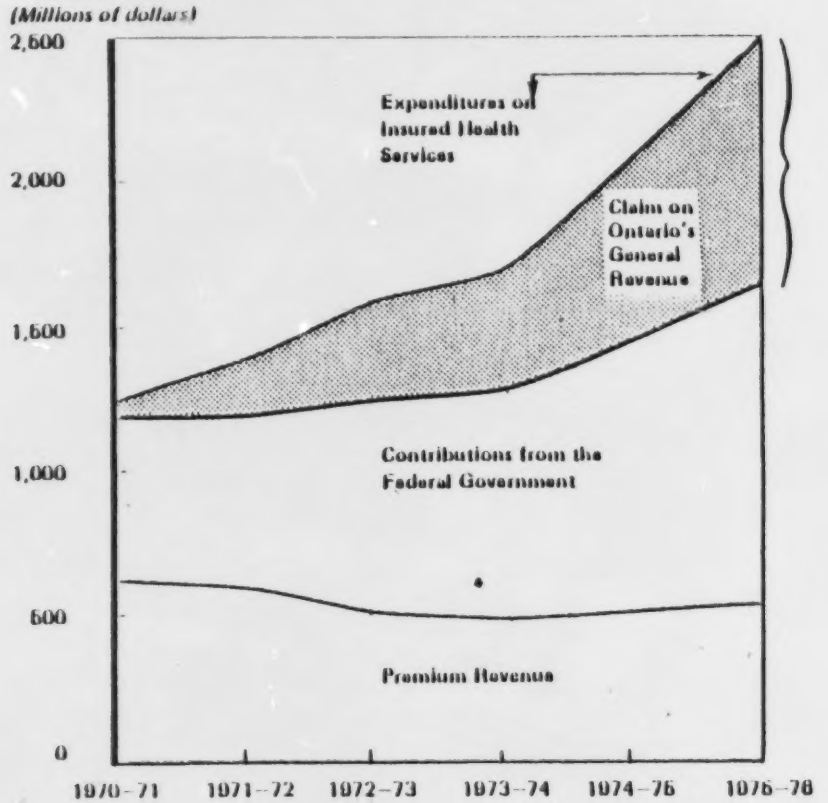
Health care expenditures up as proportion of GNP

TOTAL HEALTH CARE'S
SHARE OF CANADA'S GNP
(percentage)



Funders experience growing health financing gap . . .

HEALTH CARE FINANCING
(ONTARIO)



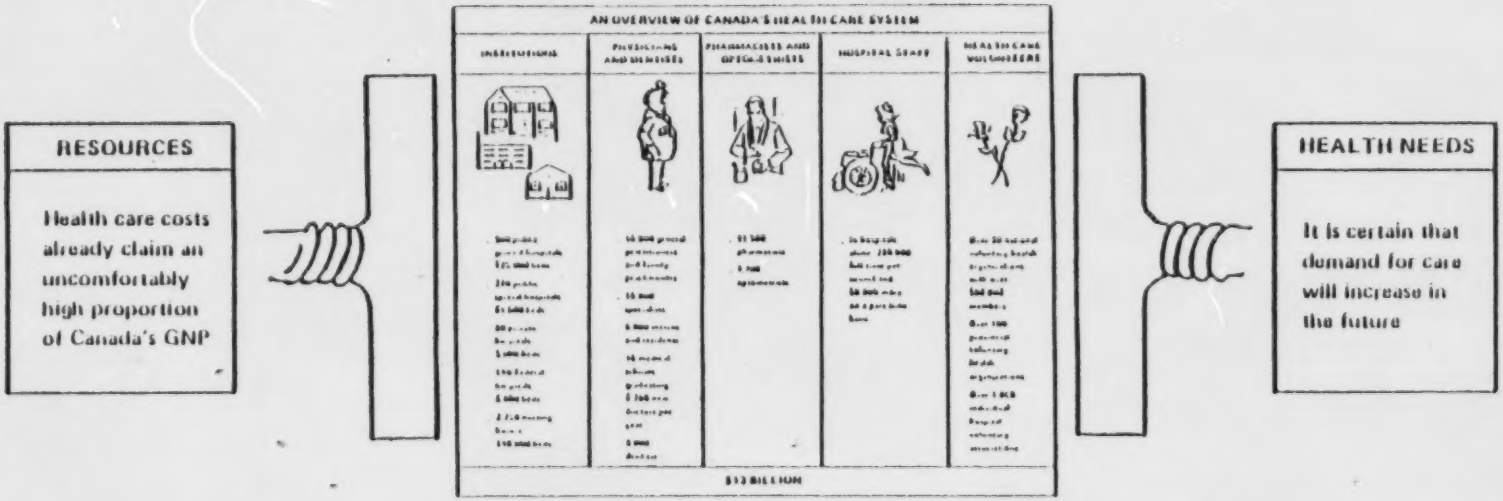
. . . that likely will grow with new federal-provincial cost-sharing arrangement

Health care system is large and complex

AN OVERVIEW OF CANADA'S HEALTH CARE SYSTEM

INSTITUTIONS	PHYSICIANS AND DENTISTS	PHARMACISTS AND OPTOMETRISTS	HOSPITAL STAFF	HEALTH CARE VOLUNTEERS
. 900 public general hospitals 126,000 beds . 270 public special hospitals 64,000 beds . 80 private hospitals 5,000 beds . 140 Federal hospitals 6,000 beds . 2,260 nursing homes 140,000 beds	. 16,000 general practitioners and family practitioners . 16,000 specialists . 6,000 interns and residents . 16 medical schools graduating 1,700 new doctors per year . 8,000 dentists	. 11,500 pharmacists . 1,700 optometrists	. In hospitals alone, 280,000 full time personnel and 60,000 more on a part time basis	. Over 30 national voluntary health organizations with over 500,000 members . Over 100 provincial voluntary health organizations . Over 1,000 individual hospital voluntary associations
113				$13 BILLION

Cost and demand pressures are likely to intensify


RESOURCES
Health care costs already claim an uncomfortably high proportion of Canada's GNP
AN OVERVIEW OF CANADA'S HEALTH CARE SYSTEM
HEALTH NEEDS
It is certain that demand for care will increase in the future

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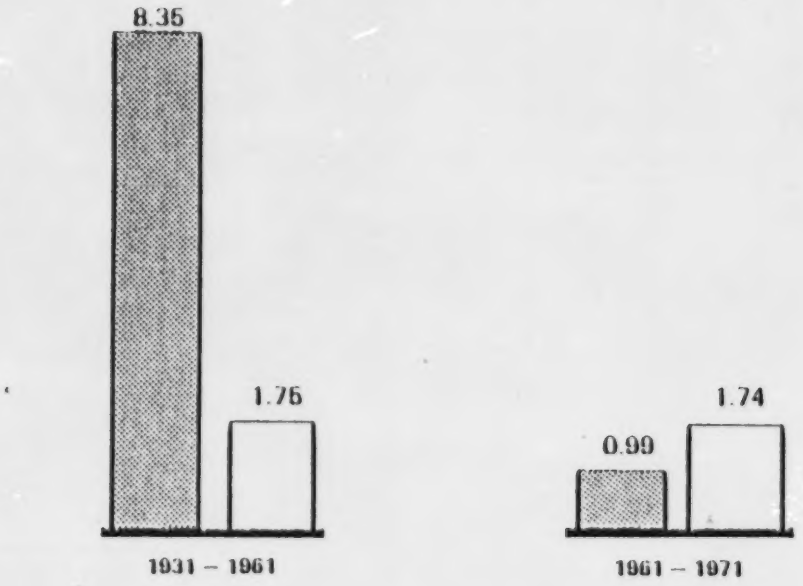
1.5

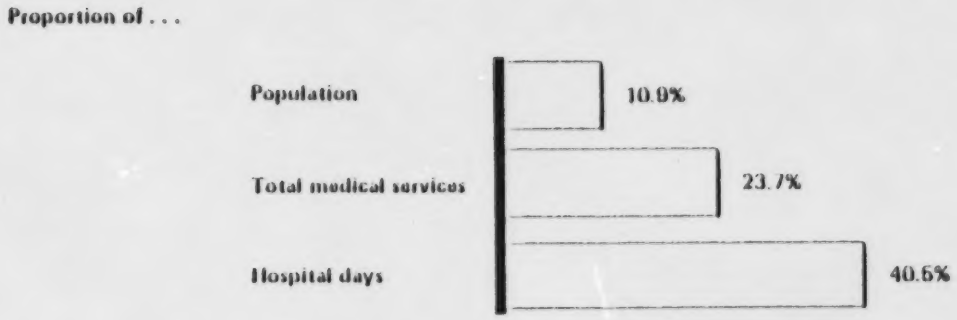
Diminishing health returns

GAINS IN CANADIANS' LIFE EXPECTANCY VERSUS RESOURCES COMMITTED



The elderly have much greater health care needs

USE OF HEALTH CARE SYSTEM BY PEOPLE AGED 65+
(Saskatchewan – 1975)



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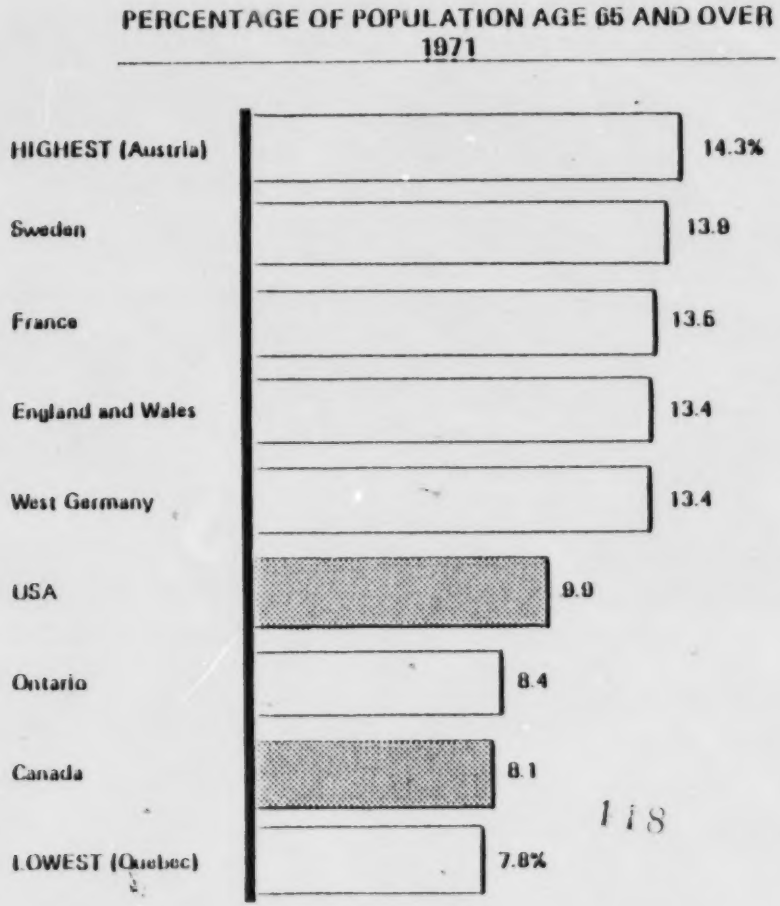
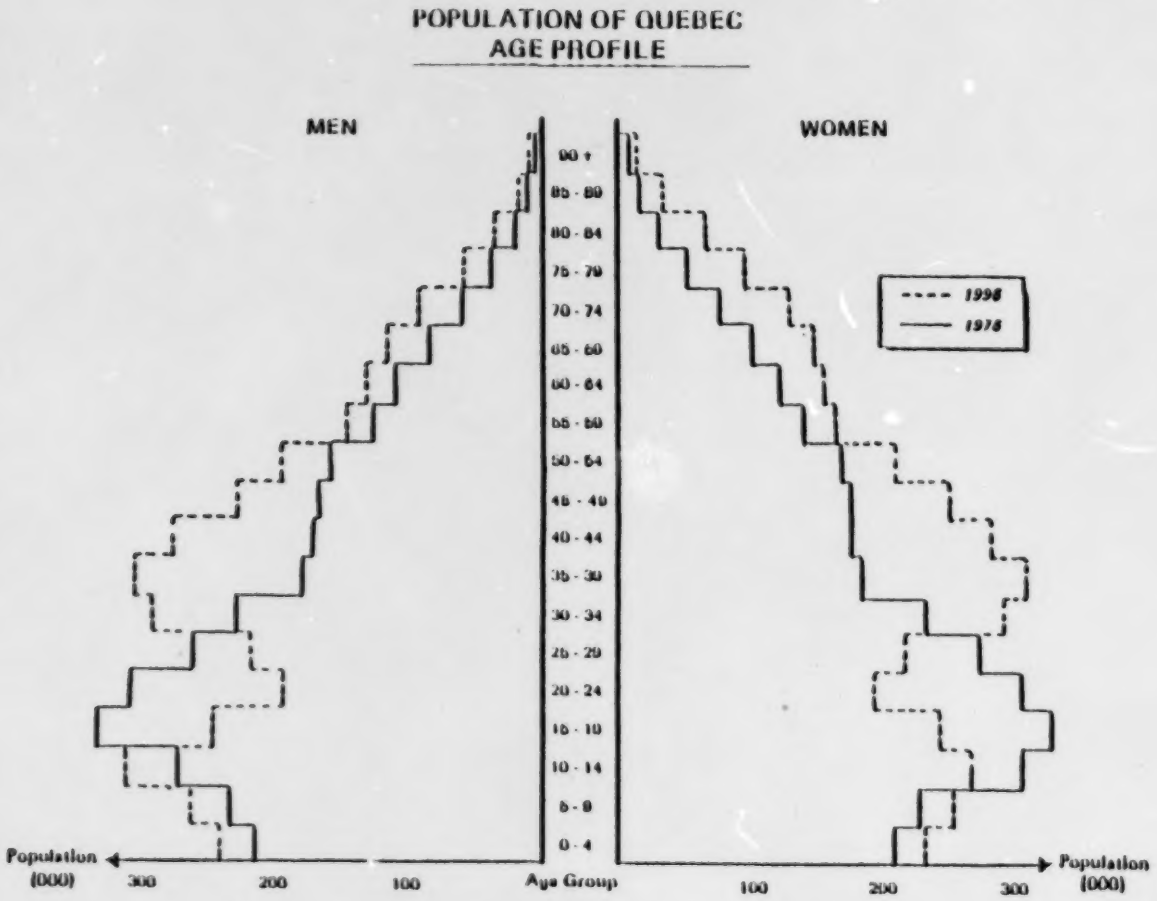
Canada and the United States have small proportions of elderly



Age structure shifting upwards



The paradox of health care: Medical advances breed further needs - e.g.,

- With conquering of infectious diseases, less curable ones such as cancer claim proportionately more attention
  - Causes more complex
  - More expensive to treat
- Sophisticated developments give hope to previously unaided sufferers, and create new and costly demands - e.g.,
  - Heart transplants
  - Renal dialysis

And so, no possibility of 'saturating' health care demand

- ¶ True, every inch of ground is won at increasing cost
- ¶ But no gain - however small - can be dismissed if there is a possibility of reducing mortality or relieving pain

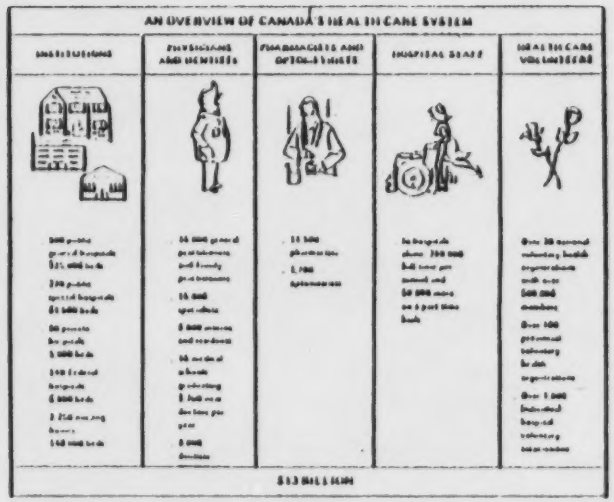
1 - 1

In sum: unrelenting cost pressure

RESOURCES

Health care costs already claim an uncomfortably high proportion of Canada's GNP

- *'High' proportion of GNP*
- *Diminishing returns*
- *Social choices involved (e.g., education, job creation)*



HEALTH NEEDS

It is certain that demand for care will increase in the future

- *Aging of the population*
- *Greater need for expensive care*

As a result, a variety of formal and informal cost containment methods are being considered

For example

- ¶ Functional Value Analysis ←
- ¶ Zero Base Budgeting
- ¶ PPBS
- ¶ Spending ceilings
- ¶ Hiring freezes
- ¶ Performance auditing (PAS)
- ¶ Sunset concept

FUNCTIONAL VALUE ANALYSIS

- Track record
- Key features
- Phases and steps
- Timing
- Requirements for success
- Workshop plans

TRACK RECORD

FVA successfully evolved to meet needs

- Developed by McKinsey in response to client needs
- Successfully applied in widely diverse organizations
- Proven successful in even the toughest labour relations environment
- Now being actively considered and applied by Canadian and U.S. institutions

KEY FEATURES

Four major characteristics

- ¶ Focuses on outputs
- ¶ Places burden and initiative on managers and professionals
- ¶ Establishes stretching think-through targets
- ¶ Uses cost-benefit analysis as basis for decisions
  - Both 'suppliers' and 'receivers' are involved
  - Data are limited and approximate

PHASE I

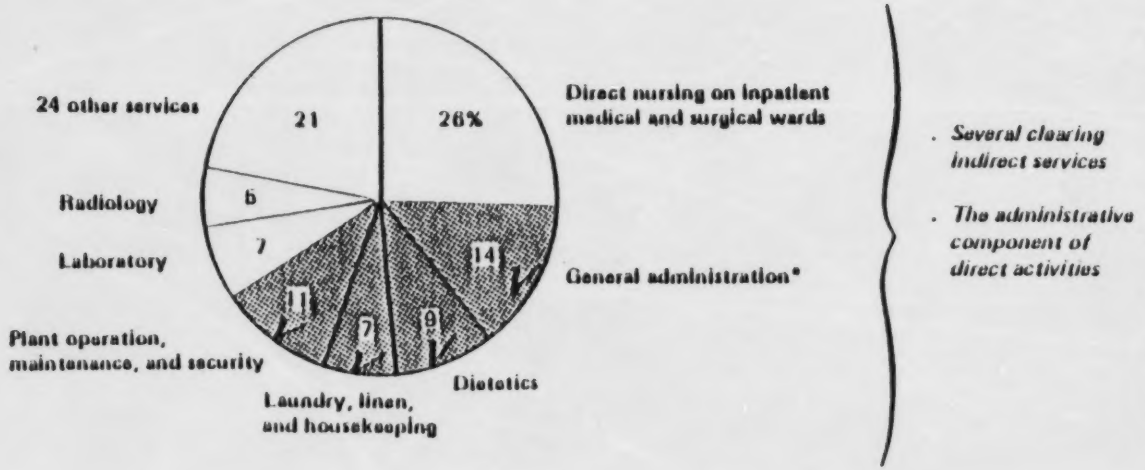
First phase is 'launching'

PHASE	STEPS	MONTH 1	2	3	4	5	6
I Getting FVA Under Way	1. Deciding on the scope of the effort						
	2. Organizing the FVA team						
	3. Establishing the ground rules						
	4. Developing communications and manpower programs						

Scope of the Effort

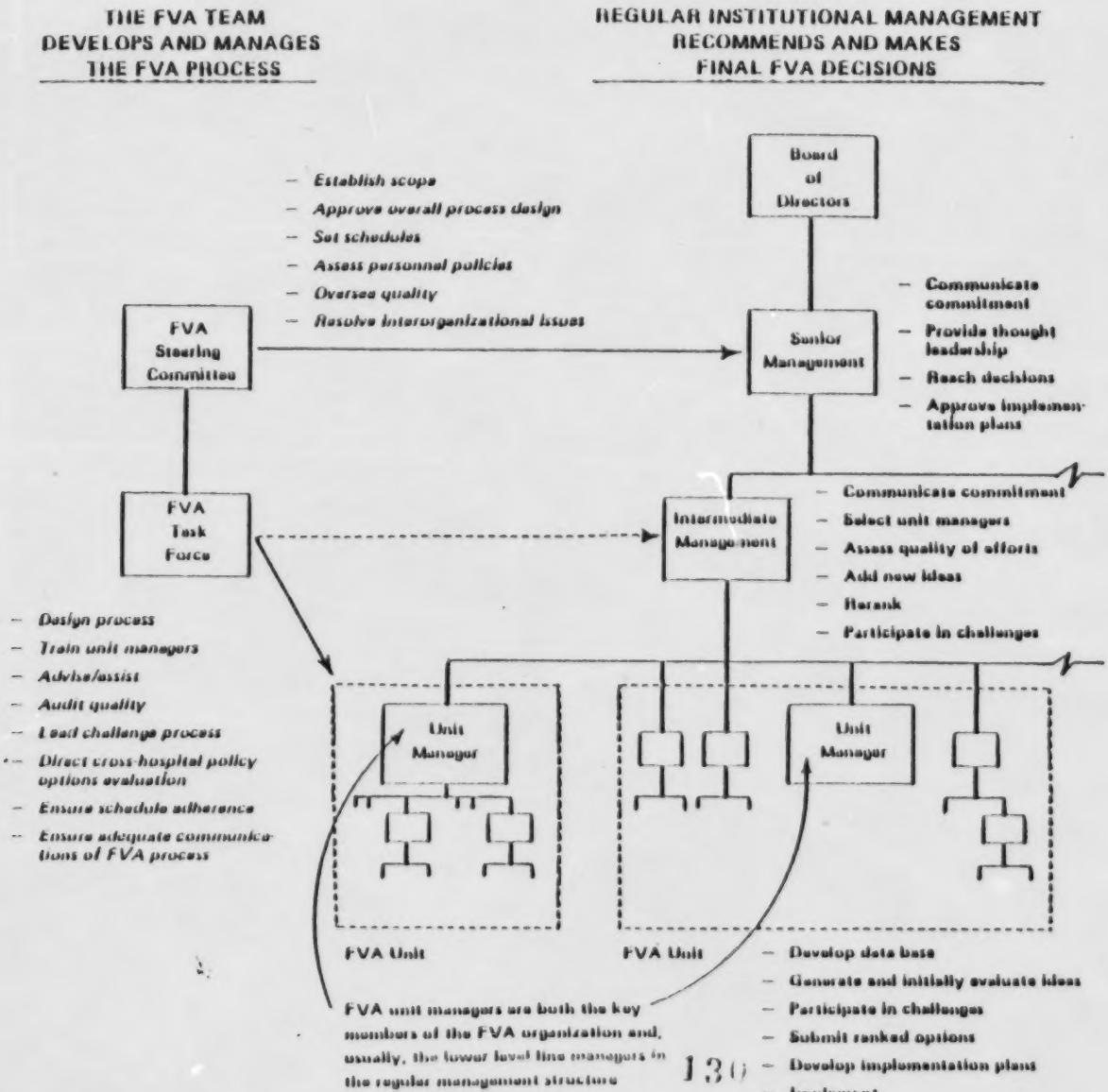
Scope should be as wide as possible

ONTARIO PUBLIC GENERAL AND ALLIED SPECIAL HOSPITALS
(total expenditures = 100 percent)

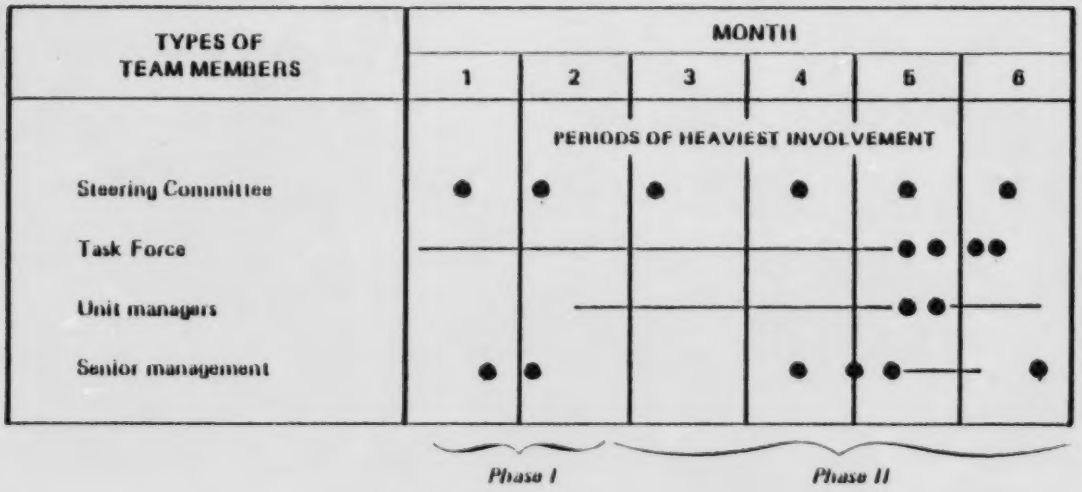


Organizing the FVA Team

A dedicated - highly talented - team is required


THE FVA TEAM DEVELOPS AND MANAGES THE FVA PROCESS
REGULAR INSTITUTIONAL MANAGEMENT RECOMMENDS AND MAKES FINAL FVA DECISIONS
Board of Directors
– Establish scope
– Approve overall process design
– Set schedules
– Assess personnel policies
– Oversee quality
– Resolve interorganizational issues
FVA Steering Committee
Senior Management
– Communicate commitment
– Provide thought leadership
– Reach decisions
– Approve implementation plans
FVA Task Force
Intermediate Management
– Communicate commitment
– Select unit managers
– Assess quality of efforts
– Add new ideas
– Rerank
– Participate in challenges
– Design process
– Train unit managers
– Advise/assist
– Audit quality
– Lead challenge process
– Direct cross-hospital policy options evaluation
– Ensure schedule adherence
– Ensure adequate communications of FVA process
Unit Manager
Unit Manager
FVA Unit
FVA Unit
FVA unit managers are both the key members of the FVA organization and, usually, the lower level line managers in the regular management structure
– Develop data base
– Generate and initially evaluate ideas
– Participate in challenges
– Submit ranked options
– Develop implementation plans
– Implement

Time commitments of FVA team members vary by stage of the process



Establishing the Ground Rules

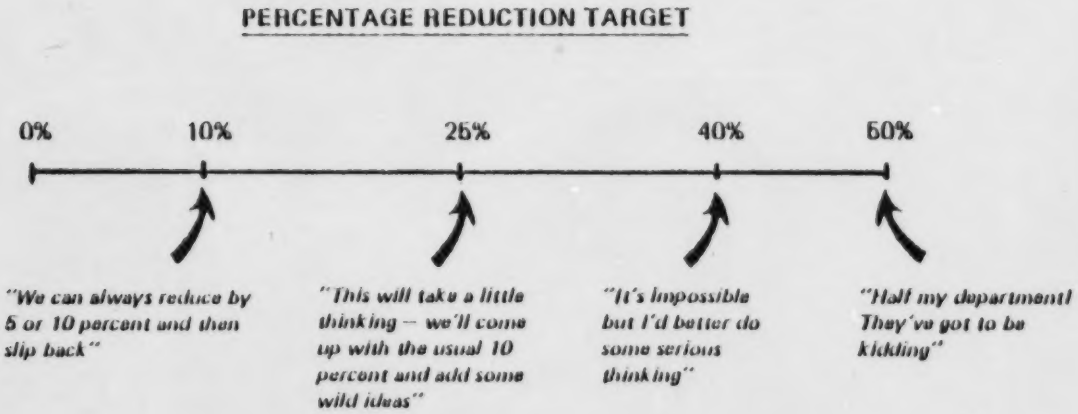
FVA requires disciplined thinking and well-thought-out ground rules

- ¶ FVA baseline budgets
- ¶ A stretch target for cost reduction
- ¶ A disciplined timetable and methodology

FVA budgets include all resources used by a unit

STEP	PROCEDURE	CALCULATION		AMOUNT
1.	List current total budget of all budget centres in the unit	Budget centres	Amount	
		TOTAL		
2.	Add or subtract any consistent variances from budget which are likely to remain through the year end	Total variance to date		
		Average/month		
		Annualized		
3.	Add back all charge outs from the unit	Department charged	Amount	
4.	If not already included in budgets, add in the salary and fringe benefits of the unit manager(s)	TOTAL		
5.	If not already in the unit budget, add back all employee benefits, payroll taxes, etc.	Benefits, taxes	Amount	
		TOTAL		
6.	Add in any major expense being generated by but not charged to the unit currently – e.g., telephone, rent, photocopying (as instructed by the Task Force)	Cost	Amount	
		TOTAL		
7.	Add in any items that are going to be in next year's budget but are not in this year's (as instructed by the Task Force)	Item	Amount	
		TOTAL		
	FVA BASELINE BUDGET (Total of column) 133			

The cost reduction target should be designed to stretch people's creative abilities

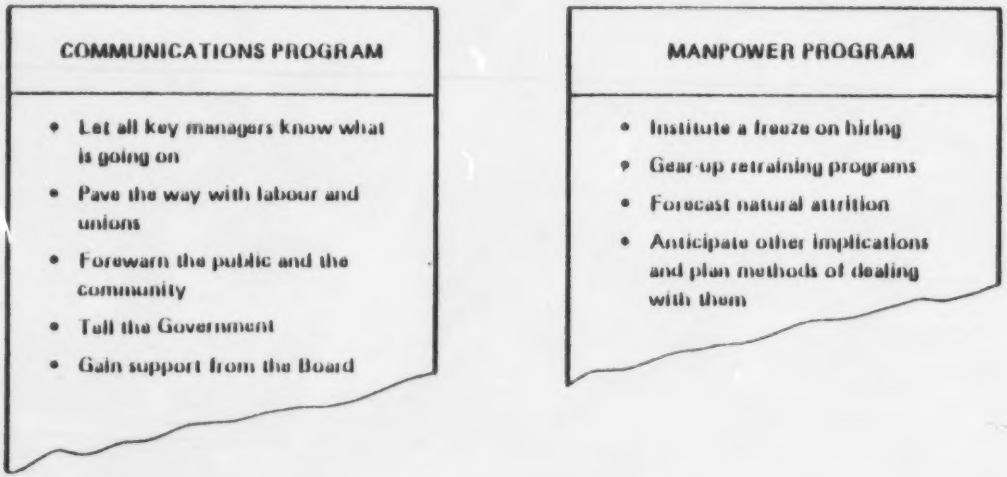

PERCENTAGE REDUCTION TARGET
0%
10%
25%
40%
50%
"We can always reduce by 5 or 10 percent and then slip back"
"This will take a little thinking – we'll come up with the usual 10 percent and add some wild ideas"
"It's impossible but I'd better do some serious thinking"
"Half my department! They've got to be kidding"

Disciplined methodology and timetable are important

- In common with other creative activities, FVA is hard work
- Most things tend to get done at the eleventh hour
- There are almost always many reasons why some things cannot be done
- Fairness and making the whole thing worthwhile require some tough-minded discipline

Developing Communication And Manpower Programs

Two complementary efforts are necessary right at the outset


COMMUNICATIONS PROGRAM
• Let all key managers know what is going on
• Pave the way with labour and unions
• Forewarn the public and the community
• Tell the Government
• Gain support from the Board
MANPOWER PROGRAM
• Institute a freeze on hiring
• Gear-up retraining programs
• Forecast natural attrition
• Anticipate other implications and plan methods of dealing with them

PHASE II

Phase II involves the actual doing and takes 4 to 5 months

PHASE	STEPS	MONTH 1	2	3	4	5	6
II Carrying Out the Process	1. Redefining costs 2. Identifying alternatives and generating ideas 3. Evaluating attractiveness/risk versus benefits 4. Making decisions 5. Implementing cost reduction ideas						

Redefining Costs

Redefining costs has three substeps

- Identifying the basic 'missions' of each unit
- Analyzing the components of each mission
- Determining the costs of each mission

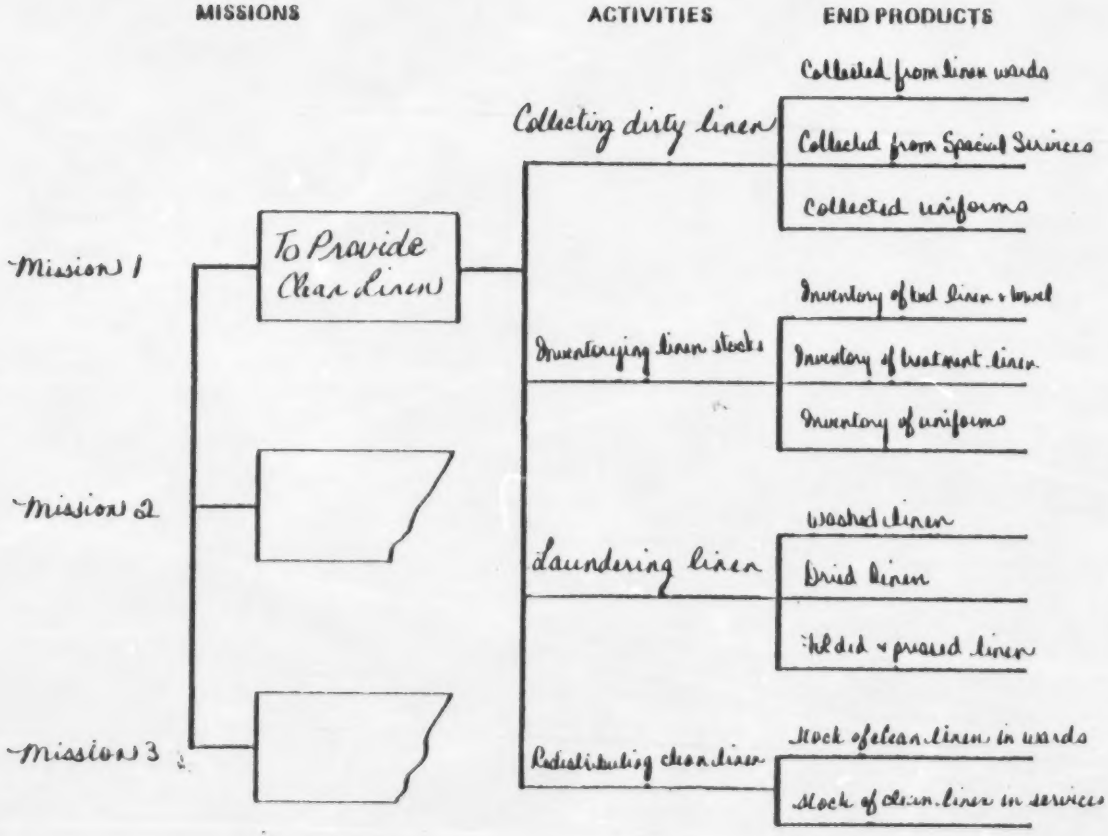
Each unit of the hospital has a small number of basic missions

- The why of its existence
- If it didn't exist the few reasons why you would create it

A function tree is used to analyze the mission

ILLUSTRATION

THE FVA 'FUNCTION TREE'



A worksheet is then used to determine costs

ILLUSTRATION

FVA RESOURCE ALLOCATION WORKSHEET

Individuals in the unit

END PRODUCT OR SERVICE	PERSONNEL COST										NON PERSONNEL COSTS	TOTAL COST OF EACH EP/S
	Susan		Mary		Joe				Total			
	M.Y.	$	M.Y.	$	M.Y.	$	M.Y.	$	M.Y.	$		
Collected linen from wards			0.3	3200	0.5	7,000			0.8	10,200	500	$ 10,700
Inventory of bed linen on wards	0.2	3,000	0.1	1,070	0.1	1,400			0.4	5,470	150	$ 5,620

List each end product or service

The total of any person's time must equal 1.0 man years

Total of all EP/S equals the department's baseline budget

Note: M.Y. = the fraction of the man year spent on the end product
$ = the dollar value (based on salary plus fringes) of the time spent

Generating Ideas

Determining what to do involves large doses of discipline and common sense

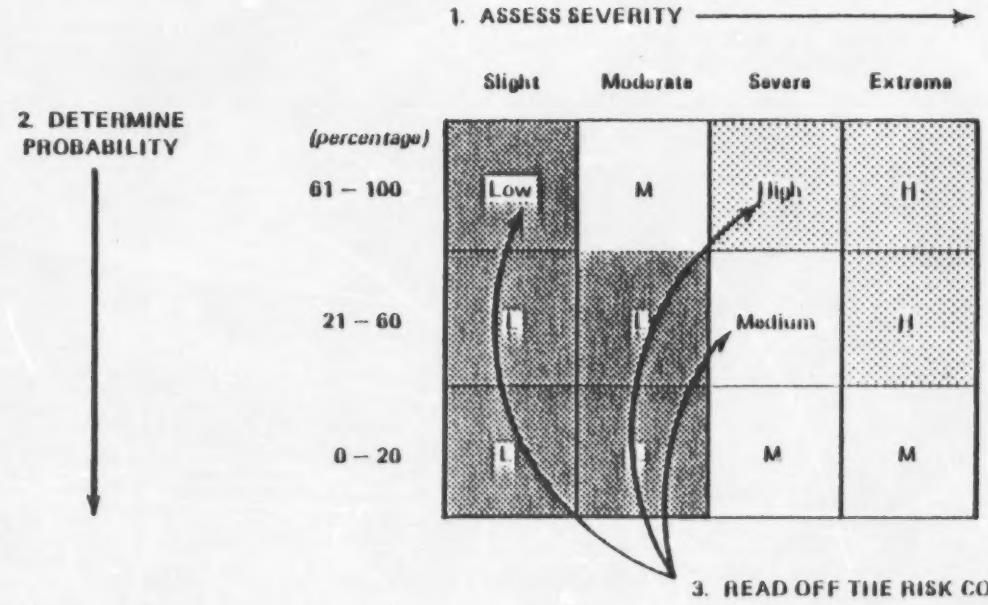
ACTIVITY																					
		DEMAND REDUCTION							STREAMLINING							OTHER					
			Reduce																		
END PRODUCTS AND SERVICES	DOLLAR EXPENDITURE	Amount	Frequency	Quality	Eliminate	Combine/ substitute	Delay	Combine	Automate	Departmentalize	Balance workload	Change procedure or workflow	Increase skill level	Decrease skill level	Make or buy						
Collect & Linens	$ 10,700		1	2		3	4		5		6										

1. Collect linens only once per day.
2. Don't sort linens at the wards.
3. Collect linens and dirty dishes at the same time.
4. Collect linens only as new linens is needed and delivered.
5. Install linen chutes.
6. Have ward orderly prepare linens for collection.

Evaluating Attractiveness

Determining the attractiveness of ideas requires assessing the 'risk'

A MATRIX FOR DETERMINING THE RISK OF IDEAS

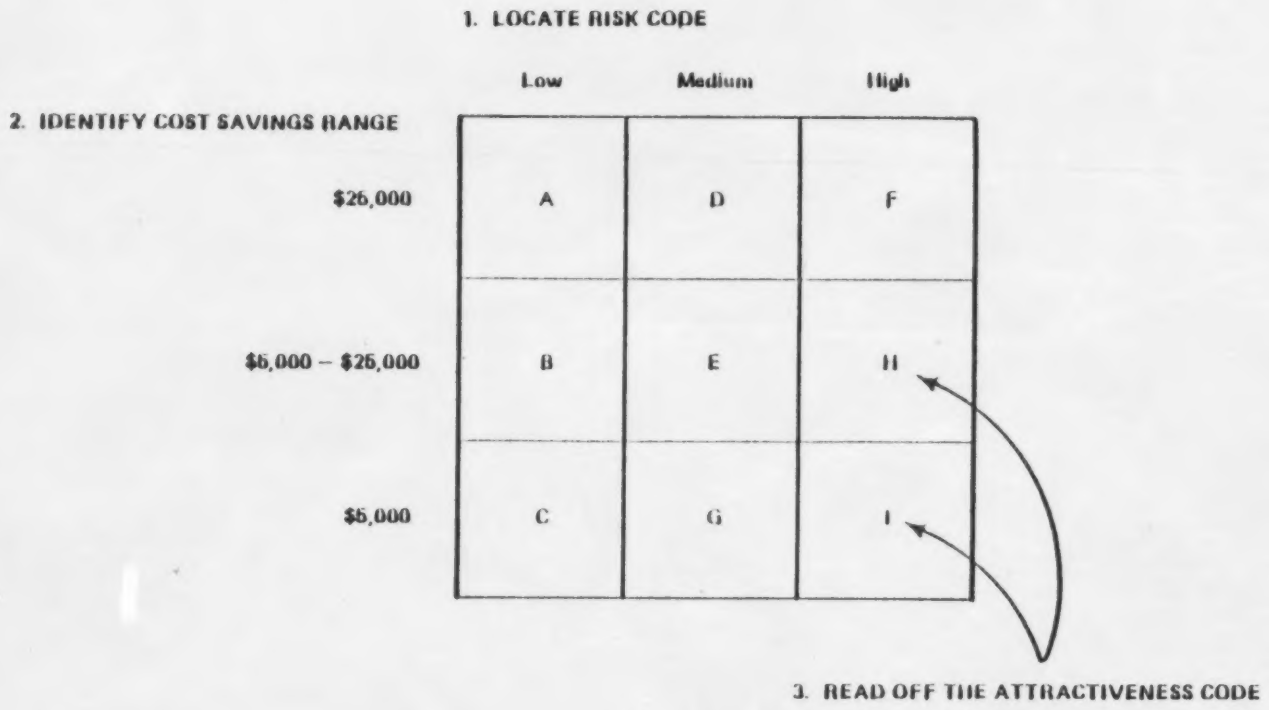


Severity indicates the degree to which the institution could be adversely affected if a particular idea is implemented. For example, it might be assessed in four categories:

- *Slight:* negligible impact on operations
- *Moderate:* somewhat hinders successful operations
- *Severe:* significantly hinders successful operations
- *Extreme:* significantly impairs patient treatment

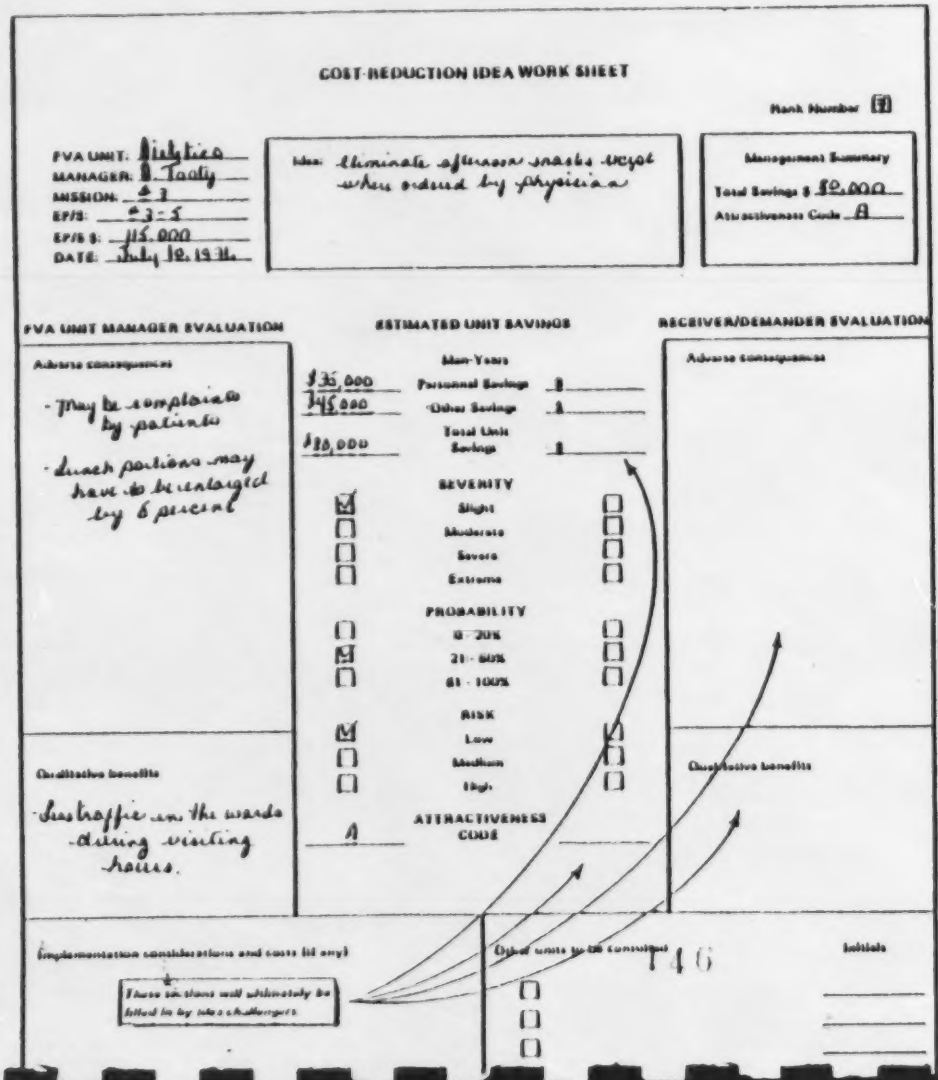
For example: *A moderately severe adverse consequence with a 50 percent probability of occurrence would have a 'low' risk rating*

Overall attractiveness is a combination of risk and possible savings



Making Decisions

Selecting ideas involves getting all necessary input . . .



COST-REDUCTION IDEA WORK SHEET

Rank Number [1]

FVA UNIT: Nighties
MANAGER: B. Tooly
MISSION: #3
EP/S: #3-5
EP/S $: 115.000
DATE: July 12, 19 11

Idea: Eliminate afternoon snacks except when ordered by physician

Management Summary
Total Savings $ 50.000
Attractiveness Code A

FVA UNIT MANAGER EVALUATION

Adverse consequences
- May be complaints by patients
- Lunch portions may have to be enlarged by 6 percent

Qualitative benefits
- Less traffic on the wards during visiting hours.

ESTIMATED UNIT SAVINGS

Man-Years		
$35,000	Personnel Savings	1
15,000	Other Savings	1
$50,000	Total Unit Savings	1

SEVERITY: [x] Slight [ ] Moderate [ ] Severe [ ] Extreme

PROBABILITY: [ ] 0 - 20% [x] 21 - 60% [ ] 61 - 100%

RISK: [x] Low [ ] Medium [ ] High

ATTRACTIVENESS CODE: A

RECEIVER/DEMANDER EVALUATION

Adverse consequences

Qualitative benefits

(Implementation considerations and costs (if any))

These sections will ultimately be filled in by idea challengers.

Other units to be contacted

Initials

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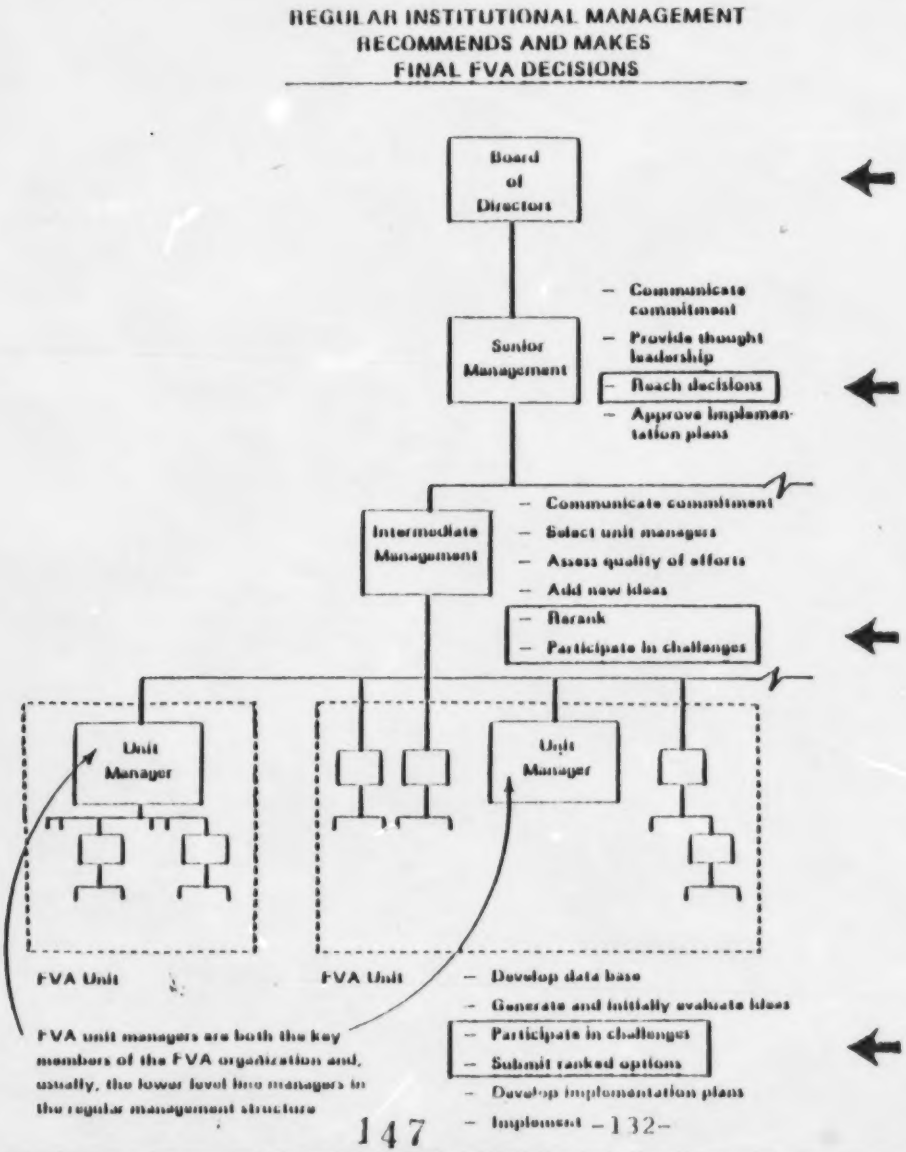
. . . and systematic review by hospital management


REGULAR INSTITUTIONAL MANAGEMENT
RECOMMENDS AND MAKES
FINAL FVA DECISIONS
Board of Directors
Senior Management
– Communicate commitment
– Provide thought leadership
– Reach decisions
– Approve implementation plans
Intermediate Management
– Communicate commitment
– Select unit managers
– Assess quality of efforts
– Add new ideas
– Rerank
– Participate in challenges
Unit Manager
Unit Manager
FVA Unit
FVA Unit
– Develop data base
– Generate and initially evaluate ideas
– Participate in challenges
– Submit ranked options
– Develop implementation plans
– Implement
FVA unit managers are both the key members of the FVA organization and, usually, the lower level line managers in the regular management structure

Implementing Ideas

Actual implementation should be carried out the way the institution usually makes changes

- ¶ Assign a sponsor
- ¶ Think through and plan for all implications
- ¶ Set deadlines and milestones
- ¶ Establish a program to evaluate and maintain the benefits of change (Zero Base Budgeting?)

REQUIREMENTS FOR SUCCESS

FVA works best under certain circumstances

- A strong need to contain costs
- Highly visible management commitment
- A large enough institution to make the payoff worth the effort
- An acceptable environment in the organization
- The ability to actually implement ideas

WORKSHOP PLANS

A 'toe in the water' approach

1. Select a discrete department
2. Rough out a baseline budget
3. Select one mission and analyze it along a function tree
4. Select one end product and push it through an idea generation form
5. Think about questions you would like to ask

FVA RESOURCE ALLOCATION WORKSHEET

Individuals in the unit

END PRODUCT OR SERVICE	PERSONNEL COST								Total		NON-PERSONNEL COSTS	TOTAL COST OF EACH EP/S
	M.Y.	$	M.Y.	$	M.Y.	$	M.Y.	$	M.Y.	$		

List each end product or service

The total of any person's time must equal 1.0 man-years

Total of all EP/S equals the department's baseline budget

Note: *M.Y. = the fraction of the man-year spent on the end product*
$ = the dollar value (based on salary plus fringes) of the time spent

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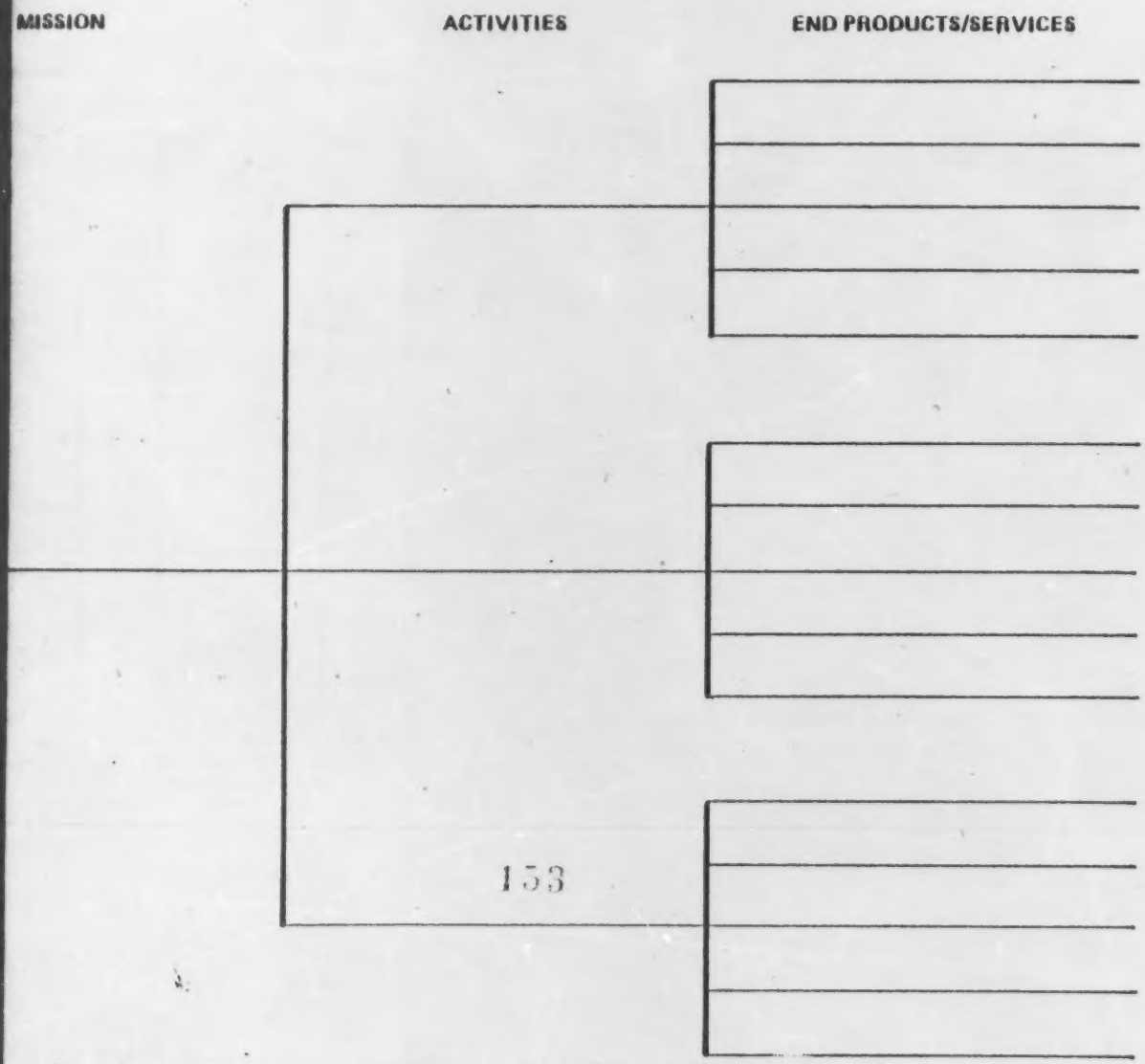
A FUNCTION TREE



END PRODUCTS AND SERVICES	DOLLAR EXPENDITURE	ACTIVITY																				
		DEMAND REDUCTION							STREAMLINING								OTHER					
		Reduce																				
		Amount	Frequency	Quality	Eliminate	Combine/ substitute	Defer	Combine	Automate	De-automate	Balance workload	Change procedure or workflow	Increase skill level	Decrease skill level	Make or buy							

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STEP	PROCEDURE	CALCULATION		AMOUNT
1.	List current total budget of all budget centres in the unit	Budget centres	Amount	
		TOTAL		
2.	Add or subtract any consistent variances from budget which are likely to remain through the year end	Total variance to date		
		Average/month		
		Annualized		
3.	Add back all charge outs from the unit	Department charged	Amount	
4.	If not already included in budgets, add in the salary and fringe benefits of the unit manager(s)	TOTAL		
5.	If not already in the unit budget, add back all employee benefits, payroll taxes, etc.	Benefits, taxes	Amount	
		TOTAL		
6.	Add in any major expense being generated by but not charged to the unit currently -- e.g., telephone, rent, photocopying (as instructed by the Task Force)	Cost	Amount	
		TOTAL		
7.	Add in any items that are going to be in next year's budget but are not in this year's (as instructed by the Task Force)	Item	Amount	
		TOTAL		
FVA BASELINE BUDGET (Total of column)				

Module 6
Presenter: F. L. Olmstead
Friday, February 2, 1979

This presentation attempts to present a means for linking the key management systems so as to clarify and order the decision-making process. As presented here, it seems to fit the needs of the participant schools. The process described is, in fact, being implemented in at least one of the schools represented at the Management Workshop.

INTEGRATION OF MANAGEMENT SYSTEMS AND PROCEDURES IN EDUCATIONAL INSTITUTIONS

1. INTRODUCTION

Nature of the Problem

- Most organizations have certain minimum systems:
  - Organization
  - Planning/Evaluation
  - Budgeting
  - Financial Accounting
  - Personnel
- Established at different times, for different purposes
- Difficult (often impossible) to interrelate, accurately judge impact of decisions (e.g., What is budget impact of planning decision?)

Purpose of the Paper (Presentation)

- Set forth basic principles for interrelating by management systems
- Give examples from a simplified case
- Discuss specific problems impacting participant institutions
- Provide participants with approaches to the solution of problems faced at their institutions.

2. BASIC PRINCIPLES OF MANAGEMENT SYSTEMS INTEGRATION

- BASE ON THE "PROGRAM/ORGANIZATION MATRIX"
  - PROGRAM - GROUPING OF LIKE OR IDENTICAL WORK ACTIVITIES
  - MATRIX - A "GRID" CROSSWALKING CONVENTIONAL ORGANIZATION (LINE AND STAFF, ETC.) AGAINST PROGRAM
  - MATRIX CELL - A UNIQUE COMBINATION OF ORGANIZATION AND PROGRAM
- DESIGN THE MATRIX TO ENCOMPASS THE TOTAL UNIVERSE OF ORGANIZATION ACTIVITIES
- USE THE "CELL" AS THE BASIC UNIT OF ANAYLSIS FOR DESIGN OF ALL SYSTEMS
- BUILDING PLANNING SYSTEM (PREFERABLY MBO PER MAGER) ON THE MATRIX; PROGRAM COLUMNS ARE GOAL ORIENTED, CELLS CONTAIN OBJECTIVE(S)
- BUDGET BUILT FROM PLANNING SYSTEM
- CHART OF ACCOUNTS BUILT AROUND BUDGET MATRIX
- ALL OTHER SYSTEMS AND PROCEDURES MUST ACCOMMODATE THE ABOVE; THIS INCLUDES:
  - EVALUATION
  - PERSONNEL
  - "HOUSEKEEPING"

3. A SIMPLIFIED EXAMPLE OF MANAGEMENT SYSTEMS INTEGRATION

The Setting

- "Western School of Allied Health"
- Curriculum
  - Basic Science (2 years)
  - Diagnostic and Professional Skills (1 year)
  - Clinical Instruction (1 year)
- Organization

  (Slide I)

Establishing the Relationship of Programs to Organization

- Define Programs
  - base on key activities
  - include ALL activities, e.g. management
- Prepare a "Matrix Organization Chart"

  (Slide II)

Integrate Planning with the Matrix Organization

- MBO (per Mager) probably the most effective approach
- Prepare "Planning Matrix" from "Matrix Organization Chart"

  (Slide III)
- Program Columns are bases fro goal statements
- Objective(s) for each valid cell of the matrix

Relationship of Budget System to Planning

- Primarily concerned with Formulation; Execution and Control more a Financial Accounting Function
- Based on Planning System (Slide IV)
- Built from individual cells

- OBJECTIVES -- ONE OR MORE PER CELL -- DEFINE "TASKS"-- AT LEAST TWO PER OBJECTIVE
- "CELL BUDGET" BUILT FROM TASK REQUIREMENTS
  - PERSONNEL
  - FRINGES
  - OTHER EXPENSES

  (SLIDE V)
- PERSONNEL SYSTEM MUST CONTROL "POSITIONS" BY ORGANIZATION UNIT (OR "CELL") TO SUPPORT BUDGET SYSTEM

INTEGRATION OF ACCOUNTING SYSTEM

- "INCOME STATEMENT" ACCOUNTS OBVIOUSLY RELATED TO BUDGET SYSTEM
- "BALANCE SHEET" ACCOUNTS MAINTAINED ONLY IN "HIGHEST" ORGANIZATION UNIT
  - FOR CONTROL
  - FOR EFFICIENCY, SIMPLICITY
  - TO MINIMIZE COMPLEXITY OF PERIPHERAL MANAGEMENT SYSTEMS (E.G., PROPERTY ACCOUNTING)
- CHART OF ACCOUNTS IS APPLIED TO "MATRIX ORGANIZATION CHART"

  (SLIDE VI)
- BASIC ACCOUNT CODES DECIMALIZED TO RELATE TO MATRIX

OTHER MANAGEMENT SYSTEMS

- EVALUATION
  - BASED ON PLANNING
  - MEASURE RESULTS COMPARED TO OBJECTIVES FOR EACH CELL

- Personnel
  - Control positions by allotment to organization unit, perhaps to each cell
  - Permanent position system, positions numbered by unit (or cell), type of employee, sequential -- and other data, if relevant
- Property Accounting
  - Controlled by "Dean's Office"; every item coded per matrix
  - Related activities (e.g., depreciation computation and accounting) are, as a result, purely a "front office" responsibility
- Filing
  - Central files fromall of matrix maintained by Dean's Office
  - Management Office of each unit keeps files for its "program row" - valid cells only
  - Files coded per matrix structure.

4. CONCLUSIONS

- All management systems and procedures can be related using the "matrix" approach
- Organization, Planning, Budgeting, and Accounting are the minimum set which <u>should</u> be integrated
- Others can be brought into a unified system when justified on a benefit/cost basis
- A pragmatic system which can and should be modified when prudent and cost effective management so dictate.

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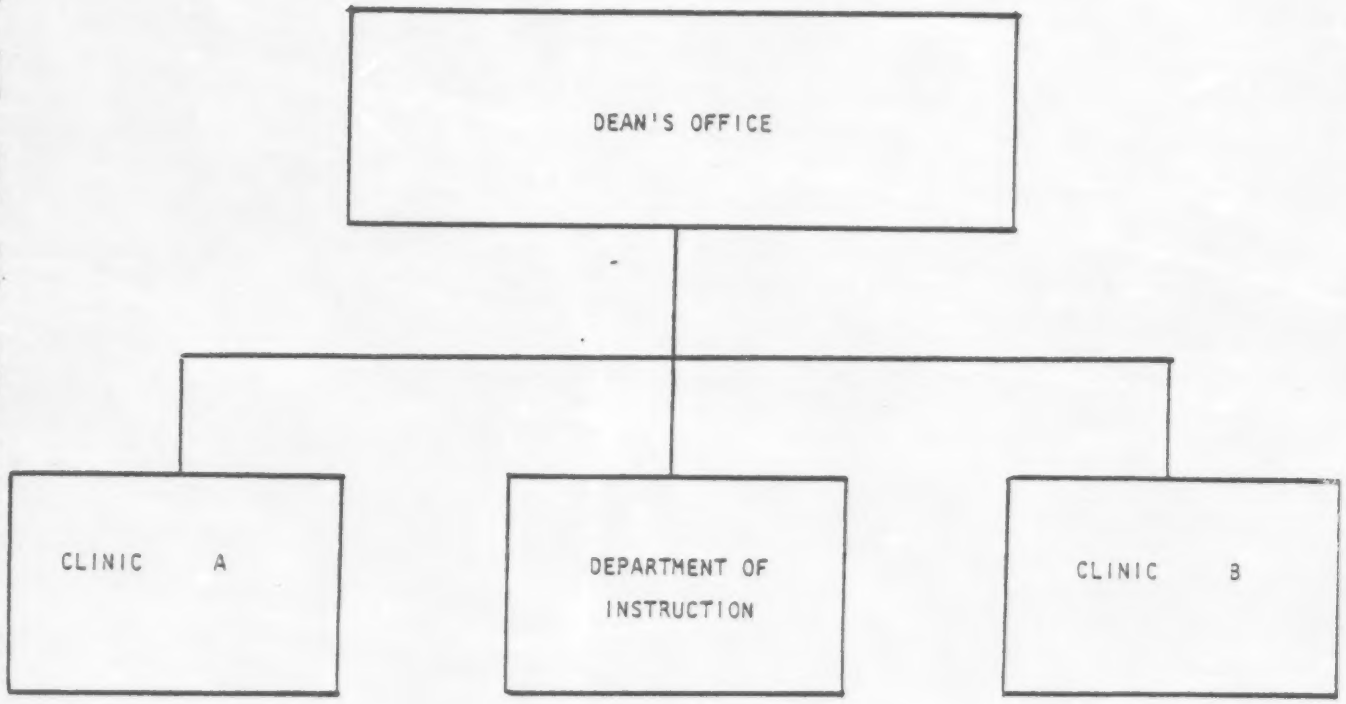
Drucker, Peter F., Management: Tasks, Responsibilites, Practices. Harper and Row, 1974.

Mager, Robert F., Goal Analysis, Fearmont Publishers, 1972

Raia, Anthony P., Managing by Objectives, Scott, Foresman and Company, 1974.

WESTERN SCHOOL OF ALLIED HEALTH
CONVENTIONAL ORGANIZATION CHART



WESTERN SCHOOL OF ALLIED HEALTH

RELATIONSHIP OF PROGRAMS
TO ORGANIZATION
STRUCTURE
("MATRIX ORGANIZATION CHART")

PROGRAMS / ORGAN. UNITS	ADMINISTRATION		BASIC SCIENCE INSTR.	DIAGNOSTIC & PROFESS. SKILLS INSTR.	CLINICAL INSTRUCTION	
	Executive Director	Management			Intramural	Extramur
DEAN'S OFFICE	Dean	Staff Spec.	*******	*******	*******	*******
DEPARTMENT OF INSTRUCTION	*******	Chairman	Faculty	Faculty	*******	*******
CLINIC A	*******	Director	*******	Faculty	Faculty	Faculty & Prac.
CLINIC B	*******	Director	*******	Faculty	Faculty	Faculty & Prac.

WESTERN SCHOOL OF ALLIED HEALTH

PLANNING MATRIX
(MANAGEMENT BY OBJECTIVES)

PROGRAMS / ORGANIZATION UNITS	ADMINISTRATION		BASIC SCIENCE INSTR.	DIAGNOSTIC & PROF. SKILLS INSTR.	CLINICAL INSTRUCTION	
	Executive Director	Management			Intramural	Extramural
	GOAL 1	GOAL 2	GOAL 3	GOAL 4	GOAL 5	GOAL 6
DEAN'S OFFICE	obj. 1.1	obj. 1.2	*******	*******	*******	*******
DEPARTMENT OF INSTRUCTION	******	obj. 2.2	obj. 2.3	obj. 2.4	*******	*******
CLINIC A	******	obj. 3.2	*******	obj. 3.4	obj. 3.5	obj. 3.6
CLINIC B	******	obj. 4.2	*******	obj. 4.4	obj. 4.5	obj. 4.6

WESTERN SCHOOL OF ALLIED HEALTH

PROGRAM BUDGET MATRIX

PROGRAMS / ORGAN. UNITS	ADMINISTRATION		BASIC SCIENCE INSTR.	DIAGNOSTIC & PROFESS. INSTR.	CLINICAL INSTR.		TOTALS
	Executive Director	Management			Intramural	Extramural	
DEAN'S OFFICE • personnel • other • subtotal	_____	_____	********	********	********	********	_____
DEPARTMENT OF INSTRUC. • personnel • other • subtotal	********	_____	_____	_____	********	********	_____
CLINIC A • personnel • other • subtotal	********	_____	********	_____	_____	_____	_____
CLINIC B • personnel • other • subtotal	********	_____ _____	********	_____ _____	_____ _____	_____ _____	_____
TOTALS	_____	_____	_____	_____	_____	_____	_____

WESTERN SCHOOL OF ALLIED HEALTH

PROGRAM BUDGET MATRIX

BUILDUP OF INDIVIDUAL CELL BUDGET

CELL XX

OBJECTIVES/TASKS / BUDGET OBJECT CLASSES	OBJECTIVE XX.1		OBJECTIVE XX.2		TOTALS
	TASK XX.1.1	TASK XX.1.2	TASK XX.2.1	TASK XX.2.2	
1. Personnel					
Pos # XX.a					
XX.b					
XX.c					
XX.d					
etc.					
Subtotal					
2. Fringes					
3. Non-Personnel					
3.1 - Space					
3.2 - Materials					
3.3 - Travel					
etc.					
Subtotal					
TOTALS					

WESTERN SCHOOL OF HEALTH

RELATIONSHIP OF ACCOUNTING SYSTEM
TO ORGANIZATION & PROGRAMS

ORGANIZATION \ PROGRAMS	ADMINISTRATION		BASIC SCIENCE INSTR.	DIAGNOSTIC & PROF. INST.	CLINICAL INSTR.	
	Executive Director	Management			Intramural	Extramural
Office of the Dean	Assets Liabilities Equity Revenues Expense	******** ******** ******** → →	******** ******** ******** ******** ********	******** ******** ******** ******** ********	******** ******** ******** ******** ********	******** ******** ******** ******** ********
Department of Instruction	********	Revenues Expenses	→	→	******** ********	******** ********
CLINIC A	********	Revenues Expenses	********	Revenues Expenses	→	
CLINIC B	********	Revenues Expenses	********	Revenues Expenses	→	

Module 6
Presenter: Spurgeon Eure, O.D.
Friday, February 2, 1979

The concept of "full-cost tuition" clearly generated the greatest degree of interest and concern. As a result of this paper, an additional, voluntary session was held on the last day of the Workshop to deal with issues around determination of true cost of education. The outcome of that meeting will be continuing work by the schools to determine their actual full costs per student.

FULL COST TUITION AND THE ACADEMIC COMMON MARKET

1. PREMISES OF THIS PAPER

A major theme in the history of American education has been an often-heated discussion of methods and alternatives for the financing of the system, complicated by the structural and fiscal differences between private and public education. The questions most often asked are:

(1) Who pays?

(2) Who benefits?

(3) Who should pay?

(4) How much, both in dollars and as a percentage of total cost?

American public education is based on the concept of universal free primary and secondary education. Only at the post-secondary level is it common for tuition to be charged for public education. Thereafter, as the student moves on to graduate or professional education, the tuition usually increases. Tuition is, of course, common-place in private education, and is usually higher than in public schools. The tuition is dramatically higher in private single-purpose Professional schools.

Charging of tuition in post-secondary public education may be justified on the basis of the costs incurred for equipment, facilities, and the much higher number of faculty relative to students, as compared to primary and secondary education. Also, by far the greatest benefit at higher education accrues to the individual. Thus, fairness suggests that a greater and greater portion of the cost be borne by the student as he or she progresses further into his or her post-secondary education.

This relationship of individual benefit to responsibility for cost of education may be ameliorated to a degree in terms of the particular professional skills being acquired. Maintenance of

a relatively high number of persons with desired professional skills can be a social goal justifying the payment of a larger share of the costs of appropriate professional education by the public at large. Thus because of public subsidization of medical education, it may be no more costly to the student than graduate study in engineering.

In time, of course, providers of such post-secondary educational services may come to rely on continuing subsidization of their "product". This has obvious pitfalls, as Government policies change, often seemingly capriciously. That is, society changes its collective "mind" with regard to its "needs" for certain types of graduates as readily as individual students change their minds regarding their fields of interest and career goals.

It is important that some arrangement for stable and rational administration of higher education financing be utilized, particularly with regard to graduate professional education. For purposes of this paper, we will limit our focus to the health care education field.

At Southern College of Optometry, we believe we are using a system which is equitable -- or at the very least, understandable -- to all parties. We use the concept of "Full Cost Tuition", which approach will be the focus of the balance of this paper.

2. THE "FULL COST TUITION" CONCEPT

At Southern College of Optometry, our experience suggests that there is one financing system which is capable of being administered impartially and with equity for all participants (administrators, students, faculty, and other "payers") in the educational process. This we have defined as "Full Cost Tuition", which approach is used for all students. Full Cost Tuition is defined as "a concept which holds the consumer of the educational process(student) solely responsible for its cost."

In essence SCO says to each of its applicants that, "if you

want an optometric education of high quality[1] as delivered by Southern College of Optometry, you must pay a specific tuition in full, less any Government or other subsidization (whatever may be avaliable)." Expressed most simply, the student's tuition responsibility would be determined by taking the expense as reflected in a yearly budget and dividing it by the number of students. This is a way of determining the actual per-student cost of the operation of the College; it automatically assigns "overhead" to tuition. Our concept holds the student solely responsible for his cost, and he is so advised before he enrolls.

If the tuition were actually calculated in this manner, we would have a normative definition of full cost tuition. However, to actually charge the tuition to the student in this manner would overcharge the student. It would ignore social benefit and more important (from the student's point of view) the portion of tuition which society elects to pay in order to ensure availability of needed health professionals. Thus, charges (as opposed to costs) are spread over a variety of sources: the student, society at large, endowment, and so forth. The Southern College of Optometry utilizes the full cost tuition concept by holding the student solely responsible for the total tuition cost while offering society an opportunity to contribute its share. The Federal Government, and the government of the state in which the applicant resides and others may contribute some share of the student's tuition which they determine appropriate from "society's" point of view. Such sums contributed by society at large are credited to the student's account. Also credited to the student's account are a share of all other incomes to the institution from endowments, investments, and auxiliary enterprises. In this latter case, contributions from school non-tuition revenues are distributed to each student's tuition so as to be equitable to all students.

3. THE "ACADEMIC COMMON MARKET"

Non-student contributions or payments against full tuition

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[1]measured in terms of behavioral objectives and performance

cost have many forms. These include grants, gifts, and contracts. At Southern College of Optometry, contracts are our most common form of non-student payment of tuition. The concept upon which our use of contract payment is based has been named by us "the academic common market". It is defined as the academic market place in which educational services are delivered to selected students from various states which states are in need of a certain type of health manpower. This concept is premised on the idea that some states may lack both sufficient numbers of certain health professionals (e.g., podiatrists or optometrists) and the capital resources in existence to produce them. Under such circumstances, a given state may opt to obtain such health professiona from the "common market" rather than by mobilizing resources within the State itself.

An example of this type of choice is the Federal Government's "Uniformed Services University of the Health Sciences". The Armed Forces, premised on shortages of key military health care specialties, has decided to mobilize Federal resources to meet this need. In effect, the Armed Services are partially withdrawing from the "common market" of existing medical schools. The military has now opted to contribute 100 percent of the tuition of some military medical and health specialists. However, this is a limited example, as the military will still rely heavily on existing medical schools for much of the needed manpower. Also, even this limited withdrawal from the common market has been fraught with controversy.

The Federal Presence in the Health Common Market

All of you are familiar with the various educational regions which have been lately defined in this country. Each region constitutes a common market for at least one curriculum which is not available in each of the states in the parti[illegible] region. The Federal Government, however, has defined a [illegible]wide "common market" for both optometric and podiatri[illegible]dicine. Contractual arrangements have been made with each of these professional schools; each of us have contracted with the Federal

Government largely on its terms. The contracts with the Federal Government are varied and different. Southern College of Optometry's contract with the Federal Government declares that we will admit a given number of students. This forces an increase in both our total and per-student cost. This, in turn, is theoretically offset by the old basic improvement grant money. If fact, though, this is not the case, as the capitation award has been consistently reduced. We, and most of our peers, are now in the position of having Federally mandated cost increases in concert with notably reduced Federal funding contributions. Of course, this is corrected in a full-cost tuition concept, at least from an administrator's point of view, but certainly to the student's detriment. And this is occurring at the same time that professionals are finding their practice ever more regulated. Other contracts which optometric and podiatric institutions have with the federal society are those covered under H.R.-II. This legislation calls for the payment of contracted sums to the student, who would in turn pay the cost of his education to the college through direct tuition charges. It should be noted that there is no per-student contract dollar limit in the legislation. The result could be that one student might pay $10,000 a year for his optometric education, while another student might pay only $1,000. In each instance, the Federal Government pays the bill. There is an obvious inequity here, in that neither quality nor cost are attempted to be balanced by the contribution of society (i.e., the Federal contract payment). If a school were to undertake the responsibility for achieving such equity by contributing funds to balance both educational services and per-student charges, one would have to question whether the administration of that school were acting prudently.

At Southern College of Optometry, we can't afford to subsidize the Federal Government. Consequently, we charge the Federal Government the full cost, or some portion of the full cost responsibility for which is assigned to all students based on the

full-cost tuition concept. The Federal Government indirectly pays us $7,200 per student for educational services. Most colleges of optometry receive far less, because most colleges charge less (since they do not compute "full cost tuitions").

Approaches to State "Common Markets"

Since it is possible to contract with the Federal Government to provide a common market for the health professions student as a national resource, it then would seem reasonable to be able to contract with a regional or state entity in like manner. Indeed, it should be possible to contract with any group which needs health manpower, particularly that developed by the optometric and podiatric curriculum. This led Southern College of Optometry to the use of existing regional mechanisms, foundations, and state departments of higher education to contract with individual states for manpower development on the basis of the needs of the particular state. At Southern College of Optometry this is generally referred to as the state contract program. The operations of the program are described below.

After several years of experience with this contract mechanism, Southern College of Optometry's preference is to operate through a regional compact. In such cases, there is an intermediary between the school and the state particularly when the state fails to honor its contract. Regional mechanisms provide a vehicle which can actively seek out states which are interested in supporting the development of your educational "product". Regional compacts provide a much stronger and more reliable base of tuition support than single states. In most instances, state governments tend not to match increasing costs of services. Regional compacts, on the other hand, maintain a standard percentage contribution to the cost and encourage increased appropriations by states to cover such increases.

State contracts, per se, call for two things. First, states are allowed to reserve a specified number of entry places, or "slots", within a school Second, they define the cost contribution per student. It should be noted, though, that students remain responsible for all unpaid tuition costs. No students are named. Indeed, many students will, from time to time, fill an existing "slot" reserved via a contract. Of course, states have other objectives in the management of such contracts. The state desires to insure that its residents who fill contract "slots" are treated equally with all other students in a given school. It wants the school to make an explicit demonstration of the support provided to the student. This is usually done by differential (lower) tuition rates for in-state students or providing a specific credit entry on tuition bills. At base, of course, this type requirement is a "PR" action by the state. The intent is to stimulate loyalty and encourage the student to return to the state and deliver health care within its bounds upon completion of his education. Since Southern College of Optometry operates on a full-cost tuition concept, all of the funds received from states are credited to the student's account, not just the funds provided by a specific contract.

Common Elements of a State or Regional Contract

The key provisions of a workable contract are outlined as follows:

(1) Institution - The services or conditions to which the school agrees are:

- To reserve a specific number of places and admit only those students which the state has certified as residents
- To list those students who fill contract "slots" and properly bill the Regional Compact or State.
- To inform the State of drop-outs and report the progress of each student

- To substitute other students of equal ability not to exceed 4 years of duration from entrance to completion for any one "slot"; i.e. to maintain an annual number of "filled slots"

- To continue students if the State contract is terminated, so long as the student meets the policies of the school

- To charge the contract states' students the same amount as the school's home state students[1]

- To refund or credit the State for students dropping out in the first 6 months.

(2) The State Agency - In return for the school's services, the State agrees:

- To pay a specific sum (currently $3,750/year at Southern College of Optometry) for each "slot" reserved for State students on or before January 1st of each year for the ongoing academic year

- To set a contract effective date and hence, renewal date, on an annual or Bi-annual basis

- To provide a Cancellation Clause containing a statement of automatic continuation or amendment subject to 1 or 2 years notice of cancellation to the school (i.e., unless positively cancelled by the State the contract is automatically extended).

4. CONCLUSIONS

The full cost tuition concept definitely adds stability to the finance of higher education. However, the administration of the school using this concept must develop stringent fiscal policies and controls. Some of the needed features include: a fixed salary schedule which has a computed index (based on C.P.I.) to ensure that the faculty and employees of the institution will not lose real wages over the term of the contract periods; the capacity to project expenses over a reasonable future period so that income to the institution may be adjusted systematically to inflation or deflation; and a strong commitment to hold the

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[1]This is automatic under the full cost tuition concept.

institution's budget in balance.

With reasonable long-term knowledge of income flow, the institution may plan for quality improvement and feel comfortable that the improvement not only can be instituted, but maintained. In other words, this approach allows for an organized growth of the institution and continuing improvement of the quality of the product.

Southern College of Optometry's experience has been that the student pays less money under the full cost tuition concept. Further, the student is more satisfied. He knows precisely what his responsibilities are, as well as who is contributing to his welfare. He derives a better sense of national, regional or state purposes and priorities regarding his chosen profession.

As with any concept and administrative process, there are pros and cons. The negative aspects of the full cost tuition program are:

- It will always push the tuition rate of the institution to an apparently higher level than other institutions' tuition rates,[1] and may discourage applicants if the applicant pool begins to drop

- It can breed over-expansion and create capital expenditures in excess of future applicant pools' needs and society's willingness to assume the financial obligations.

For every service there is a cost. Many educational administrators "overlook" certain costs of service since they are attuned to a "free educational society". The full cost tuition concept, however, is a business principle that can be effectively applied to education as to any other business. Indeed, the survival of high quality professional degree education may well require it.

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[1]In fact, true full cost probably varies only slightly from school to school; what does very is stated charges, which amounts to cost less all offsets available to a particular school.

Attachment A

FULL COST TUITION AND THE ACADEMIC COMMON MARKET

HOW DOES FULL-COST TUITION OPERATE:

The Annual Budget is based on a five-year projection, with the expense side being drafted first.

Student charges are demonstrated by example.

The gross expense side of the Budget is demonstrated by example, and the full-cost tuition arrived at.

Advantages:

(a) Program can be maintained or advanced on a known income base.

(b) Cost can be projected over five years and matched to income.

(c) Inflation of cost of living are automatically placed in the income and expense prior to budget operation.

(d) Advanced warning is provided for financial distress and a correction made prior to its occurrence.

(e) Provides a real and comprehensive way of explaining income to probable donors.

(f) Stimulates aid of parents to join in seeking donors.

(g) Provides a central checkpoint for expanding or reducing the programs.

HOW DOES FULL-COST TUITION OPERATE:

Disadvantages:

(a) In the beginning, it makes fund raising through accepted channels more difficult.

(b) Tends to move toward apparent higher cost for students (discourages financially disadvantaged applicants).

(c) Difficult to manage in the early stages of initiation and be fair with donors and students. Must be phased in.

(d) Faculty has objections in the early stages when they become aware of the cost of adding courses or subtracting courses from the curriculum.

Examples of institutions using this financial method are the Dental School, University of Colorado, and Georgetown Medical School.

States that there are many road signs as to full-cost tuition becoming the method of finance for higher education in the future, such as: regional health care concept in the Manpower Act, contracts in SREB, willingness of government agencies to participate, development of new schools--only practical way.

Module 10

Presenters: Patricia Carlile

Robert Zimmerman

Saturday, February 3, 1979

Personnel Management is an area which often generates much heat and little light. This became evident during group discussions related to presentations on techniques of personnel management. Almost every institution present had difficult problems in this area, most of which appeared to be rather specific to the school in question. Nonetheless, a good interchange was noted, and it appeared that the dialogue provided some ideas for personnel problem solution to each school.

DOME DEPARTMENT OF MAXIMUM EFFECIENCY, OFFICE OF DIRECTOR

DOME PERSONNEL MANAGEMENT INSTRUCTIONS--PERFORMANCE STANDARDS

SUBJECT: ESTABLISHING PERFORMANCE STANDARDS

TO : ALL SUPERVISORS AND MANAGERS

Introduction:

This instruction contains basic information on the establishment and utilization of performance standards. Properly done, performance standards can contribute a great deal to supervisor and employee alike. Employees have a clear understanding of what is expected of them either on a day-to-day basis or over an extended period of time. The supervisor's life is a little easier because of this understanding. Generally, production is higher, quality is better, and morale is improved when proper standards are maintained. There are also some fringe benefits. Ratings are easier to prepare, awards are less complicated, and promotions can be justified, all because the standards provide something to measure against. As a management tool, performance standards readily contribute to more meaningful program planning and evaluation and can be a valuable factor in budget preparation and projected personnel and resource requirements.

Two different approaches are presented: one which deals with the quality of performance on a day-to-day basis, and the other which is concerned with the end results rather than the details of how these results are obtained. This latter approach is often referred to as management by objectives.

Performance standards are not particularly difficult to establish, but to be useful and effective, it is necessary that the employee and the manager reach agreement and understanding on the standards. Lacking this, the whole program may well expire of its own accord.

In reviewing these instructions, it will readily become apparent that Part I is best suited to those jobs that involve work which is repetitive, easily measured or counted, or which results in a tangible work product. Examples are given. Part II is preferred when the job involves a great deal of planning, directing the work of others, establishing policy, doing research,etc. Since the end product is the important element, some positions will lend themselves equally well to either method of evaluation. Sample blank forms are provided for each type of standard.

PART I

Performance Standards Defined:

A performance standard is a statement of how well an employee in a specific position must perform a work assignment under existing conditions in order for the performance to be considered satisfactory. The standard, which must be mutually understood by the supervisor and the employee, is not a restatement of the position description, merely listing tasks which must be done, but is a means of measurement which takes off where the position description ends. It is a valuable management tool, sadly overlooked and misunderstood, and most often developed only when a disciplinary action is contemplated or a performance award is earned.

Performance standards should be established at a level which will satisfactorily meet the operating needs of the unit. Perfection should not be demanded unless it is essential. Standards should be normally attainable by any competent, qualified person assigned to the position, and some should be able to exceed them. Taking an average of group performance will not necessarily give the correct level. This could result in the standard being too low for proper results or too high to be reasonable.

Who Develops Performance Standards:

The supervisor in charge of the work, subject to the review of higher authority, determines the final performance standards. However, the employee's participation in the development of the standards is important, and the supervisor and the employee should review each standard together. When there is disagreement, the employee should state the reasons for disagreement and, when possible, suggest changes. The supervisor should consider the employee's views and either change the standard or explain it further. For adequate performance, there should be agreement on what is required.

Obtaining the help and concurrence of the employee in establishing performance standards will help establish the validity of the standards from the employee's point of view and will greatly contribute to the employee's understanding and acceptance of the standards. It is management's responsibility, however, to make the final determination in establishing standards. This is essential in order for management to plan its operations and production in advance and estimate the number of employees required to achieve the mission of the organization.

How Performance Standards are Used:

Performance standards have two basic aims: to improve work performance and to assist employees to obtain better job satisfaction. From the employee's standpoint, standards give a clear picture of just what is expected in both quality and quantity. This should help to eliminate confusion and frustration, give the employee a means for self-evaluation, and point out areas in which improvements are needed.

Adequate performance standards give the supervisor a sound basis for estimating future work capacity; furnish data for planning, organizing, and assigning work; provide a means for determining who needs training and how much; and help establish a sound basis for personnel actions without waiting for formal ratings. Performance standards also provide an excellent avenue for evaluating and discussing an employee's performance and for identifying outstanding as well as ineffective employees. Proper standards lead to better morale, higher production, and lower cost.

Steps in Preparing Performance Standards:

A performance standard is worthwhile only insofar as it relates to a specific task and is understood by the supervisor and the worker who is performing the job. Satisfactory work performance...not the group average or outstanding performance...is the level which should be set for a standard. In writing the standard, therefore, "satisfactory" must be clearly defined and established at a level which will serve the purpose of the unit and also give the employee a reasonable degree of job satisfaction. Experience over an extended period, work production records, and comparison with similar jobs can all be used in preparing standards.

Identify Major Assignments in the Position:

As a first step, the supervisor and employee should review the position description and agree on its accuracy. Then, after the supervisor explains to the employee the reasons for performance standards, the employee may prepare a list of work assignments, or the supervisor and employee may prepare a list jointly. Next, the supervisor identifies the significant work assignments. A significant work assignment is that part of the work required of an individual which produces a single product or effect capable of standing alone as useful work. Each significant assignment should be stated clearly, simply, and in action words. Statements of work assignments should not include each detail of work procedures. Individual tasks may be grouped into a work assignment. If a work assignment is performed

only intermittently or periodically, but is required to achieve a single product or effect, it should be included as a significant work assignment. Some examples are:

Types statistical tables
Serves as receptionist
Directs and oversees work or staff in the office
Motivates employees to improve their work
Takes and transcribes dictation

Identifying Types of Measurement:

The standards or methods of measurement applied to the performance of each significant work assignment should be expressed in clear, concise, and simple language. Any or all of the following standards are used in measuring work performance:

Quantity - The numerical range of units of production required.

Can output be measured? Must the employee turn out a certain number of units in a given time? The quantity requirement is most generally used where the worker produces tangible results which are easily measured, because in many shops or offices the quantity of production is important. For example: Stencils ____ to ____ crates per day. Posts ____ to ____ stock balance cards per day. Transmit ____ to ____ teletypes per day. Where possible, a numerical range (such as posts 55-65 cards per hour) should take into consideration the variation in work flow or difficulty and base the rate on work records, not on average of fastest or slowest employee. The employee should clearly understand just HOW MUCH work is expected.

Quality - The accuracy, appearance of work, and general results desired.

Must the employee do accurate work? Must it be thorough? A quality requirement tells how well work must be done and is generally found in most major tasks. Quality refers to elements such as appearance, accuracy, fitness, usefulness, and effectiveness of work. It may also state the maximum permissable error rate allowable in a given quantity of work. The employee should be told just HOW WELL the job must be done.

Time - The time limit set as a requirement of satisfactory work where the quantity of work cannot be measured or is not of prime importance.

If output cannot be measured, are there time limits within which the employee must get certain things done? Are there deadlines on some job elements but not on others? In many instances, where a definite quantity requirement cannot be established, it is possible to set time limits (hours, days, weeks, or months) as requirements.

For example: all letters must be transcribed and properly typed within ____ to ____ hours after dictation. When work tends to fluctuate or there are seasonal trends, a requirement of time is more practicable than a quantity requirement. When time is a requirement, the employee must know not only what is to be done, but WHEN it must be done.

Manner - A concise statement which indicates the desired effect sought in the performance of a specific work assignment.

Must the work be carried out in a certain way in order to be satisfactory? Are the personal characteristics of the employee important to the job? In addition to determining quality and quantity requirements, it may be important in some jobs that the employee possess certain personal characteristics. Appropriate matters for this requirement are voice characteristics, manner of public contact, behavior, attitude, personal appearance, dress habits, personal health, and ability to deal with people. General terms such as initiative, resourcefulness, dependability, industry, etc., should be avoided. Specific characteristics or MANNER of performance should be described only when required by the nature of the actual assignments.

Writing the Performance Standards:

After the significant work assignments and the types of measurements to be used have been determined, the performance standards should be put in writing. Only significant work assignments should be included, not every detail of the work.

Using the format of the "Record of Performance Standards," set up tentative standards. The following example illustrates a method:

PRIMARY FUNCTIONS	PERFORMANCE WILL BE UP TO STANDARD WHEN THE FOLLOWING OCCURS
Prepares correspondence and reports	Prepares replies to correspondence within time limits; letters within three days of receipt and reports by deadline dates. Not more than one out of ten requires correction by supervisor.
Interviews applicants	Receives visitors graciously, courteously and gives them personal attention. Provides information correctly and intelligently.

Clear, direct, active language should be used, describing only what is to be accomplished. After the performance standards have been determined, they should be discussed with the employee to be sure that they are applicable, reasonable, and understandable. If necessary, they should be revised. However, management, in the form of the supervisor, is responsible for production and therefore must make the final decision on setting the standards. The completed performance standard must be dated and identify the position by title, grade, incumbent, and organizational unit. Two copies of the performance standards are prepared, and one copy is given to the employee. After a reasonable period of time, the supervisor should check the standards with the employee to determine their validity. As changes occur in the work, each requirement should be tested and needed changes made in the statement. Properly done, the performance standard provides for mutual understanding between the supervisor and worker as to acceptable performance for each assigned task in terms of quality, quantity, and time factors, and how the work should be done.

SAMPLE RECORD OF PERFORMANCE STANDARDS Page 1 of __

INSTRUCTIONS: To be prepared jointly, in duplicate, by the supervisor and the employee. Each is to retain a copy of information. Not to become a part of the personnel record.

EMPLOYEE'S NAME	POSITION TITLE AND GRADE
	Administrative Officer, L 12

PRIMARY FUNCTIONS	PERFORMANCE WILL BE UP TO STANDARD WHEN THE FOLLOWING OCCURS
1. Supervision	Establishes methods of assigning work that usually result in fair and equitable distribution, and employees seldom have a justifiable reason for complaint. Makes or directs spot review of work processed with sufficient frequency to keep well informed of the manner in which employees are performing their duties. Usually obtains adherence to time limits and deadlines so that in most instances the objectives of the organization are satisfactorily met. By example and training, usually encourages employees to simplify their work and builds in them a feeling of responsibility for the successful operation of the organization as a whole. Usually gives praise and credit where due so that high working morale is maintained. Grants leave so employees may have vacations and work of the division is not jeopardized by violation of leave privileges, absenteeism, and assures that an adequate staff is present at all times. Discusses with employees individual problems that arise in their work and makes decisions that usually reflect sound judgment.
2. Administration	Carries out responsibilities in practically all assignments so that the Director is not unnecessarily burdened, but seldom fails to consult with supervisor in instances where policies have not been definitely established or authority to act has not been delegated.

EMPLOYEE'S SIGNATURE	DATE	SUPERVISOR'S SIGNATURE	DATE

SAMPLE RECORD OF PERFORMANCE STANDARDS Page 2 of 2

EMPLOYEE'S NAME	POSITION TITLE AND GRADE Administrative Officer, L-12
PRIMARY FUNCTIONS	PERFORMANCE WILL BE UP TO STANDARD WHEN THE FOLLOWING OCCURS
2. (Administration, Cont'd)	Usually keeps alert to changing conditions recognizing problems that arise and promptly discusses them with the Director. Submits well thought out suggestions and recommends changes that would result in improvements or would expedite the work in most instances. Promptly puts into effect changes in policy and procedures approved by the Director. In most instances interprets to employees such changes, explaining objectives and giving clear directions so that employees have a thorough understanding of the reasons for such changes and the methods to be followed in putting them into effect. Exercises sound judgment and initiative in solving problems in the absence of the Director in such a manner as to maintain uninterrupted work flow and service to units. In speaking to groups or in meetings, conduct reflects credit upon the Division. With only a minimum of guidance, relieves the Director of most details and keeps Director informed of principal actions taken. Performs duties and maintains relations with other agencies so as to merit personal and professional respect of people contacted. Presents clear, concise and complete programs, most of which are acceptable without revision and the remainder of which require only minor revision. Public contact assignments are executed so effectively that inquirers usually accept replies as authoritative.

S A M P L E RECORD OF PERFORMANCE STANDARDS Page 1 of 3

INSTRUCTIONS: To be prepared jointly, in duplicate, by the supervisor and the employee. Each is to retain a copy for information. Not to become a part of the personnel record.

EMPLOYEE'S NAME	POSITION TITLE AND GRADE Secretary, L -6
PRIMARY FUNCTIONS	PERFORMANCE WILL BE UP TO STANDARD WHEN THE FOLLOWING OCCURS
1. Receptionist	Receives visitors graciously and courteously and gives them personal attention. Uses tact in screening visitors and inquirers. Transmits messages correctly and intelligently. Answers telephone pleasantly, courteously, and modulates voice so as not to interrupt or bother others in the office.
2. Typing	Typing is neat, accurate, legible, and evenly arranged on page with not more than 5% error before proofreading. Corrections are inconspicuous. Strikeovers are permitted, up to a maximum of three per letter, on internal correspondence signed by supervisor. None are permitted on correspondence outside the OS. Work is completed within specified time or not later than one day after receipt.
3. Filing	Labels and keeps files in an orderly, neat, and systematic manner. Material can be located easily by anyone. Without consulting the supervisor in each instance, consolidates material and eliminates most duplicate or outdated copies.
4 Secretarial	Replies to correspondence within one day of receipt of assignment. Not more than one out of five letters and memoranda requires correction by supervisor. Takes dictation at rate of at least 80 words per minute consistent with nature and difficulty of material with few interruptions of dictator. Transcribes material within next working day with not more than 2% error. Types memorandum and copies correspondence at rate of 50 wpm. Not more than 5% of work has typographical errors.

EMPLOYEE'S SIGNATURE	DATE	SUPERVISOR'S SIGNATURE	DATE

SAMPLE RECORD OF PERFORMANCE STANDARDS

EMPLOYEE'S NAME	POSITION TITLE AND GRADE Secretary, GS-6
PRIMARY FUNCTIONS	PERFORMANCE WILL BE UP TO STANDARD WHEN THE FOLLOWING OCCURS
4. (continued)	Prepares travel vouchers from rough notes in accord with regulations so that not more than 2% are returned. In 3 out of 4 cases grasps, without repetition of instructions, the kind of information desired so as to find on own initiative the information, and to assemble it for the supervisor. Not more than 5% of correspondence is delayed in handling for improper attention to routing. Finds 90% of errors in grammar, spelling, appearance, format, and office procedure. Not more than 1 out of 5 pieces of correspondence are delayed because files are not attached.
5. Work Habits and Attitude	Incumbent is prompt in reporting for work and from lunch and rest periods, setting a good example for other persons and for the public. Work is organized so that all components of the duties and responsibilities are coordinated with the total program. Keeps informed on the internal operations of the unit in order that information may be current. Employee is dependable and conducts self in a manner that brings credit to the office. Incumbent strives to maintain good employee relations with others in order to assist in developing the good will of the unit. Employee maintains the confidential nature of personnel material and information. Employee usually schedules leave one day in advance, and calls supervisor within

S A M P L E RECORD OF PERFORMANCE STANDARDS Page 3 of [illegible]

EMPLOYEE'S NAME	POSITION TITLE AND GRADE Secretary, 4 -6
PRIMARY FUNCTIONS	PERFORMANCE WILL BE UP TO STANDARD WHEN THE FOLLOWING OCCURS
5. (continued)	first hour of workday if emergency or unplanned absence is necessary. Employee is usually neat and well-groomed with personal appearance and mode of dress that brings credit to the office of the unit. Employee is interested in the work and demonstrates enthusiasm for the organization's programs. Employee encourages constructive criticism, promotes and accepts suggestions, and willingly complies with reasonable requests of supervisors. Employee is adaptable to changing situations and displays the ability to accept responsibility. Employee keeps the supervisor informed of significant events occuring during supervisor's absence. Employee is alert to any opportunity to gain knowledge of work and routine in other departments. Employee advises the supervisor of any suggestions of improvement in work methods of the job in relationship to others in the organization.

SAMPLE RECORD OF PERFORMANCE STANDARDS Page 1 of 1

INSTRUCTIONS: To be prepared jointly, in duplicate, by the supervisor and the employee. Each is to retain a copy for information. Not to become a part of the personnel record.

EMPLOYEE'S NAME	POSITION TITLE AND GRADE Clerk-Stenographer L -4
PRIMARY FUNCTIONS	PERFORMANCE WILL BE UP TO STANDARD WHEN THE FOLLOWING OCCURS
1. Takes and transcribes oral dictation, transcribes from recording machine; types from rough drafts. Material transcribed consists of highly technical terminology about 50% of the time	Dictation will be taken at a rate of 80 wpm. Notes and belts must be transcribed in final form. Responsible for correct spelling, format, computation of figures, sentence structure, and overall appearance and correctness of finished correspondence. Typing speed required is 60 wpm minimum and not more than 2 erasures per page is allowed.
2. Responsible for general flow of all correspondence.	So that correspondence and reporting can be completed according to deadlines and the time allotted, the incumbent must keep work organized so that priority work is accomplished first and all work is kept current with all routine work completed by due dates.
3. Maintain Branch filing system.	Filing will be kept current and accurately maintained. No more than a 3 day backlog is allowed. Responsible for proper coding of material placed in files.
4. Receives visitors in the office.	Receives visitors graciously, courteously, and gives them personal attention. Uses tact in screening visitors and inquirers. Transmits messages correctly and intelligently.
5. Work habits and conduct.	Incumbent is expected to comply with all employment regulations; observe safety rules; observe office rules on conduct and attendance requirements, including scheduling leave in advance. Conduct, both on and off the job, should be of such a nature as will not reflect adversely upon the Government, nor adversely affect the incumbent's job usefulness. Supervision must be accepted in a cooperative manner. Incumbent is expected to cooperate with all other employees, and promptly and cooperatively perform such duties as are assigned.

EMPLOYEE'S SIGNATURE	DATE	SUPERVISOR'S SIGNATURE	DATE

S A M P L E RECORD OF PERFORMANCE STANDARDS Page ___ of __

INSTRUCTIONS: To be prepared jointly, in duplicate, by the supervisor and the employee. Each is to retain a copy for information. Not to become a part of the personnel record.

EMPLOYEE'S NAME	POSITION TITLE AND GRADE
PRIMARY FUNCTIONS	PERFORMANCE WILL BE UP TO STANDARD WHEN THE FOLLOWING OCCURS

EMPLOYEE'S SIGNATURE	DATE	SUPERVISOR'S SIGNATURE	DATE

Be challenging to the employee but be realistic in terms of the available resources. Distinguish between "must-do" objectives and "it-would-be-nice-to-have" objectives. As with the primary functions, it is very important to have agreement between the supervisor and employee in establishing objectives. Some examples of objectives, based on the primary function of "survey" above, would be:

1. Select an appropriate standardized attitude survey for use within the Division and procure 300 copies by May 15.

2. Arrange for appropriate space for administering survey and train assistants by May 18.

3. Prepare necessary notifications and administer survey by May 25.

4. Prepare statistical reports of results for internal publication by July 31.

In the examples shown above, the details of how to accomplish the desired results are left up to the employee. If the employee finds that certain objectives cannot be accomplished or that they cannot be completed within the time frame, the supervisor and the employee should review the situation and modify the objectives accordingly. For example, if funds for the project are withdrawn, it may be impossible to purchase the 300 attitude surveys needed and therefore the survey cannot be conducted. A slight modification could occur if the one large conference room is being painted and it will not be available until June 7. In this case, the survey would be delayed, but not cancelled. Changes in objectives can be noted in the right hand column labled "evaluation and comments."

Conducting the Review:

The review process is essential to determine how well the previously established objectives have been accomplished. The review should take place shortly after the time designated in the objectives for completion of the work. This may be a matter of a few months or six months or more. In reviewing and evaluating the employee's performance, the supervisor should pay particular attention to the following kinds of factors: Were the objectives met or exceeded? Were any objectives not met? If not, why not? Have objectives changed? Were the objectives realistic? What are some specific examples of strong or weak performance? Are there personal factors involved? Supervisor or situational factors involved?

Completing the Evaluation and Comments:

After the review has been completed, an overall evaluation of performance and accomplishment of objectives should be undertaken. If the objectives have been accomplished in a satisfactory manner, very little comment may be required except to record satisfaction with the results. However, if modifications have been required, some objectives not met or partially met,

it will be necessary to go into more detail and comment on the causes and actions taken. It is also appropriate to discuss with the employee and document here, suggestions for additional training to overcome weaknesses in background and experience. It would also be proper to record comments and suggestions made by the employee relative to evaluation of the elements being discussed.

Summary:

A new "Record of Primary Functions, Objectives, and Performance Review" is prepared as often as needed to accommodate new assignments and projects given to the employee. The information gained through the review and evaluation process provides meaningful and concrete material on which to base new assignments, promotions, awards, training, or other necessary managerial action. The employee benefits by being involved in the planning and review, knowing in advance the basis upon which his performance will be evaluated, and in having a clear understanding of just what is expected of him. The supervisor benefits from improved employee performance, an objective method of evaluating performance, advance planning of work projects and budget needs, and better utilization of personnel. The organization benefits by a higher level of performance all around.

RECORD OF PRIMARY FUNCTIONS, OBJECTIVES, AND PERFORMANCE REVIEW Page ___ of ___ pages

INSTRUCTIONS: To be prepared jointly, in duplicate, by the supervisor and the employee. Each is to retain a copy for information. Not to become a part of the personnel record.

EMPLOYEE'S NAME	POSITION TITLE AND GRADE

PRIMARY FUNCTIONS	PRIMARY OBJECTIVES	PERFORMANCE REVIEW AND EVALUATION	
		REVIEW Were objectives accomplished? To what degree?	EVALUATION AND COMMENTS Reasons objectives not met. Explain objective changes. (Lack of funds, mission changed, personnel shortage no equipment, etc.)
Major job functions requiring production of results - in order of importance.	For each primary function, specify results expected and time-cost frame of accomplishment.		

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SAMPLE RECORD OF PERFORMANCE STANDARDS Page ____ of ____

EMPLOYEE'S NAME	POSITION TITLE AND GRADE Secretary, L-6
PRIMARY FUNCTIONS	PERFORMANCE WILL BE UP TO STANDARD WHEN THE FOLLOWING OCCURS

PART II

Supplemental Instructions for preparing Performance Standards Using the RECORD OF PRIMARY FUNCTIONS, OBJECTIVES, AND PERFORMANCE REVIEW form.

The basic instructions for preparing performance standards in Part I use a system of listing the primary job elements which are of major importance to the job. These are identified as "significant work assignments." The next step is to make a specific statement about how each "significant work assignment" is to be done to be considered satisfactory. Depending upon the item, this may involve quantity, quality, time, manner, or any combination of these. The principal point is that this system is chiefly concerned with establishing the way in which the job will be done. There is an assumption that if various elements of the job are done in a proper, prescribed way, the end product will be satisfactory, whether that is a tangible item or a service. Significant work assignments may change from time to time, but generally they remain fairly static for long periods.

Another way of establishing performance standards is more oriented to end results than to the details of how these results were achieved. In this system, it is expected that work elements and objectives will change frequently and that the process will be periodically reviewed and evaluated. The form "Record of Primary Functions, Objectives, and Performance Review" is used in establishing and evaluating these standards.

Establishing Primary Functions:

The primary functions are the major job functions of the employee's job at a given time. Generally, not more than five or six different functions should be identified. The supervisor and employee prepare the list of functions jointly and agree on their relative importance to the job.

The primary functions should be stated in broad terms, such as:

Survey - Conduct employee attitude survey.
Administration - Administer the change-over program to M-4 automatic printers.
Development - Develop files retrival system for back-pay claimants.

Functions listed should be the key responsibility areas of the employee's job.

Establishing Primary Objectives:

For each primary function that is listed, there must be one or more primary objective. These are the job objectives or performance targets that define the results expected of the employee in each primary function within a specified period of time. The time may vary, but should be clearly stated as three months, six months, etc. Results expected should be specific and state exactly what is to be accomplished and when. Only desired results should be listed, not the activities that lead up to the results. Whenever possible, state the expected results in measurable terms.

CRITICAL REQUIREMENTS OF PERFORMANCE FOR ACCOUNTING AND BUDGET PERSONNEL

Personnel Research Staff

Office of Personnel

Department of Maximum Effiency

Effecient City, U. S. A.

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Critical Requirements of Performance for Accounting and Budget Personnel

To answer the question, "How are we doing," management depends upon the adequacy of its performance information system. In any occupational area, if we have inadequate information about the requirements for satisfactory performance and the achievement of these requirements, we cannot tell how well we are doing.

During the past three years the Personnel Research Staff of the DEPARTMENT OF MAXIMUM EFFIENCY has been doing research aimed at improving our performance information systems. The following is a study of critical performance requirements for the 1200-odd Accounting and Budget personnel of the Department.

We started with the question: "What are the critical requirements of performance in this occupation?" We got the facts by going to the people directly involved in doing and in supervising the work. We asked each of them to describe critical incidents that they had observed.

What are critical incidents?

Critical incidents are specific actions or behaviors that have actually been observed. They do not involve personality labels or lists of traits. An effective critical incident leads to significantly better than average accomplishment of a particular aspect of a job, assignment, or responsibility. An ineffective incident leads to significant delay, mistakes, omissions, or lack of accomplishment. One might say that an incident is called critical because it makes a real difference. The judgments are based upon results--the outcomes of peoples' actions and behaviors and the products of their work. They are judgments made by people at various levels, but always by the people in the best position to observe: those closest to the operational situation, those best situated to base their judgments upon the objective facts, within human limits of perceptual fallibility.

An individual critical incident is not an evaluation of a person. It is an observation of "what happened," what action took place, and what its consequences were.

Each person was asked to write up eight incidents--two effective and two ineffective incidents involving "job or technical competence" and two of each kind involving "working with people." Altogether we collected about 5000 critical incidents from Accounting and Budget personnel. To help in carrying out statistical studies of group data; we also asked for certain additional information, but complete individual anonymity was assured.

Determining critical performance requirements

After the incidents had been collected, we sorted them into groups, according to the different critical performance requirements that they reflected. There were no predetermined categories. Fifty-six critical requirements grew out of the content of the incident pool. There were slightly more of these requirements for the ineffective than for the effective categories.

The related critical requirements were then grouped together to identify critical performance areas. We tested our classification for objectivity by having five observers independently sort a sample of incidents. The average agreement among observers was about 60%, which was deemed sufficient for the purposes of the study. This procedure yielded eight performance areas.

The performance record

A copy of the form developed for Accounting and Budget personnel in DOME is presented in Exhibit 1. It is organized by performance areas. Within each performance area the related critical requirements are listed--effective behaviors on the left side, ineffective on the right. Spaces are provided under each performance area for the supervisor to make notes of critical incidents at the time they occur. He will have a Performance Record for each of his subordinates.

Experience in industry has shown that on the average, supervisors of groups of up to thirty employees need no more than five minutes a day to make entries for the whole group. This is so for two reasons. First, most of the things that employees do fall within the broad range of normal, average, typical, satisfactory, or acceptable performance. Critical incidents that "make a real difference" are rarer. Just a few employees are likely to be involved on any given day. Some days there may be none. Secondly, most of the basic descriptive material is already in the Performance Record. A short note in the appropriate performance area is all that is needed to insure that the information will not be forgotten and that the incident can be recalled later on.

I. CARRYING OUT ASSIGNMENTS

1. PERFORMING ASSIGNMENTS ACCURATELY

A. Detected clerical error. B. Detected error in procedure or instructions. C. Completed task with minimal information or instructions.

a. Did not perform specific operation or task correctly. b. Did not follow procedure or instructions. c. Did not adequately verify and/or support reports or statements. d. Did not meet deadline or report status of work. e. Did not follow through. f. Did not properly safeguard important documents.

DATE	ITEM	WHAT HAPPENED	DATE	ITEM	WHAT HAPPENED
			2/8	c	No detail on
					report X, redone

2. ASSUMING RESPONSIBILITY AND RESPONDING TO NEED FOR EXTRA EFFORT

A. Developed new procedure. B. Demonstrated alertness and/or follow through in unusual circumstances. C. Carefully planned work assignment. D. Procured additional information. E. Voluntarily contributed extra effort to complete task.

a. Did not keep informed on job activities or instructions. b. Did not properly utilize time. c. Did not meet appointments. d. Did not maintain proper personal appearance. e. Did not report absence.

DATE	ITEM	WHAT HAPPENED	DATE	ITEM	WHAT HAPPENED
6/5	A	Completed report Z in			
		less time by listing			
		new current activities			
		in a separate form.			

II. WORKING WITH OTHERS

3. RELATIONSHIPS WITH OTHER ORGANIZATIONS

A. Presented information tactfully. B. Gave helpful assistance to others.

a. Did not use tact in presenting information. b. Acted inconsiderately toward auditee's program.

DATE	ITEM	WHAT HAPPENED	DATE	ITEM	WHAT HAPPENED

4. COOPERATING AND GETTING ALONG WITH OTHERS

A. Assisted others when needed.
B. Stimulated cooperation.
C. Made skillful group presentation.

a. Refused to help fellow worker. b. Acted inconsiderately toward others. c. Resisted or disobeyed supervisor. d. Did not coordinate with other group. e. Acted outside scope of authority. f. Used offensive language.

DATE	ITEM	WHAT HAPPENED	DATE	ITEM	WHAT HAPPENED

III. MANAGING WORK AND SUPERVISING OTHERS

5. PLANNING AND ORGANIZING WORK

A. Provided in advance for contingencies.

a. Set up inappropriate assignments or work schedules. b. Did not delegate responsibilities appropriately.

DATE	ITEM	WHAT HAPPENED	DATE	ITEM	WHAT HAPPENED

6. MOTIVATING SUBORDINATES

A. Gave praise or recognition for superior performance. B. Counseled privately on performance when needed. C. Settled difference among employees. D. Considered employee's personal problem. E. Developed teamwork and cooperation.

a. Criticized in presence of others. b. Failed to discuss subordinate's performance. c. Failed to find cause of non-performance. d. Showed favoritism to subordinate. e. Failed to maintain cordial relations with subordinate. f. Acted in arbitrary or dictatorial manner.

DATE	ITEM	WHAT HAPPENED	DATE	ITEM	WHAT HAPPENED

7. TRAINING AND DEVELOPING SUBORDINATES

A. Provided clear instructions and training. B. Encouraged self-improvement.

a. Did not provide training or adequate instructions. b. Refused to try new approaches.

DATE	ITEM	WHAT HAPPENED	DATE	ITEM	WHAT HAPPENED

8. MAINTAINING COMMUNICATIONS

A. Notified employee(s) of impending change. B. Gave employee opportunity to explain.

a. Did not notify employee(s) of impending change. b. Did not clarify or answer questions. c. Did not explain reasons for decisions affecting employee. d. Did not discuss changes in employee's report.

DATE	ITEM	WHAT HAPPENED	DATE	ITEM	WHAT HAPPENED

IV. MISCELLANEOUS

(Identify items or enter additional notes or incidents that have not been otherwise classified).

DATE	ITEM	WHAT HAPPENED	DATE	ITEM	WHAT HAPPENED

Suppose, for example, an employee fails to provide supporting detail for a report and the report has to be done over. Such an incident falls in performance area 1, "Performing Assignments Accurately". Within that area the incident fits under c, on the right hand side of the page. As to "What Happened", the supervisor might merely note "No detail on report X, redone", which should be enough to recall the incident to his mind at some later time.

Again, suppose that the employee's performance record showed the following entry under 2A: "Completed report Z in less time by listing new current activities in a separate form". The statement of critical requirement 2A will serve to remind the supervisor that this incident involved a new twist developed by this employee. In both examples the relevant information is neatly summarized in a single short phrase.

PUTTING CRITICAL INCIDENTS TO WORK

Personnel performance information for decision-making

Up to this point we have concentrated upon providing an understanding of what critical incidents are, and how they are used to define the critical performance requirements of an occupation and to develop a performance record. Hopefully, experienced managers in among our readers have begun to perceive the applicability and utility of such information at many points across a broad range of management activities.

If we consistently assemble and maintain a store of information on individuals' performance at work, we will have available the essential facts needed to arrive at any of the administrative personnel decisions we are called upon to make. The summation of the pluses and minuses of individual performance can give us an improved comprehension of the requirements that most influence success and failure in achieving our objectives. We will reduce the burden of separately maintaining large overlapping files of performance information for each administrative application (e.g. awards, transfers, promotions, annual ratings, training needs).

From here on we will explore in greater depth some specific ways supervisors and managers can make use of the critical incident technique and critical incident records.

What can critical incidents tell management?

Our answers can be developed in two areas: (1) individual supervisor-subordinate relations; and (2) general personnel management functions and programs.

Individual supervisor-subordinate relations

Accumulating information about performance in the critical requirements of work continually rather than intermittently, provides a more objective record of information. The pressures to "mold" the information are less than when it must be pulled from your head only when a report on an individual is needed for some specific purpose. This is so, because the ends to be served by the report tend to determine what information will be retrieved and offered on that occasion. Contrary to good theory, the supervisor in practice usually makes his judgment first, and then finds "facts" to support it, instead of the other way around. So, if all performance information is presented as part of administrative reports, there remains no independent source of data collected under "neutral" conditions.

A supervisor's note in a person's performance record is neither a punishment nor a reward. The performance record is not an evaluation form, nor is the supervisor attempting to evaluate the person when he makes a note for the record. He is only evaluating the quality of a specific action or performance. The notes are merely reminders of facts to be considered in talking to the employee about his work, and for reference when personnel decisions are to be taken later on. They are as much the property of the employee as of the supervisor. If the employee wants to use these notes to improve himself, they are available for discussion with his supervisor. The employee makes the record. The supervisor only keeps it.

Since observations are noted when they happen, the information is less subject to forgetting and errors of recall. Since the critical incidents are identified with the normal work situation and discussed when they happen, both parties are likely to develop a better balanced perspective.

As a consequence, the significance of individual incidents is less likely to be inflated out of all proportion to their place in the total picture of performance.

Because the incidents deal with observable behavior and its results, it is possible to discuss performance, and even to evaluate it on a less emotion-provoking level than is so often the case when inability to recall specific illustrative incidents lead to generalized and questionable personality analysis.

Furthermore, the summaries of an individual's performance history that underlie the evaluations and decisions needed in performance review, career planning, promotion rosters, and training plans, are less likely

to be looked upon as bureaucratic procedures, largely divorced from the realities of day-to-day experience and the normal relations between a man and his boss. This can mean improvement not only in job performance, attitudes, and common understanding, but in the quality of supervision as well.

In these circumstances, forms and procedures are developed to facilitate the use of information, but the forms are clearly subordinated to the substance of the information system.

As a result, the occasions when formal review and evaluation take place are less likely to be regarded as uncomfortable special occasions during which both parties must communicate self-consciously, with their guards up. The "summing up" is more likely to be looked upon in a healthy fashion as the natural consequence of shared experience, and as part of a jointly held aim to further the success of the outfit of which both are a part.

General personnel management function and programs

Apart from those situations of an individual nature, the pools of critical incidents that are accumulated offer valuable knowledge to managers. Given supplementary information on such characteristics of the groups involved as grade level, length of service, age, sex, and occupational specialty, useful comparisons can be made. Again let us look at some examples.

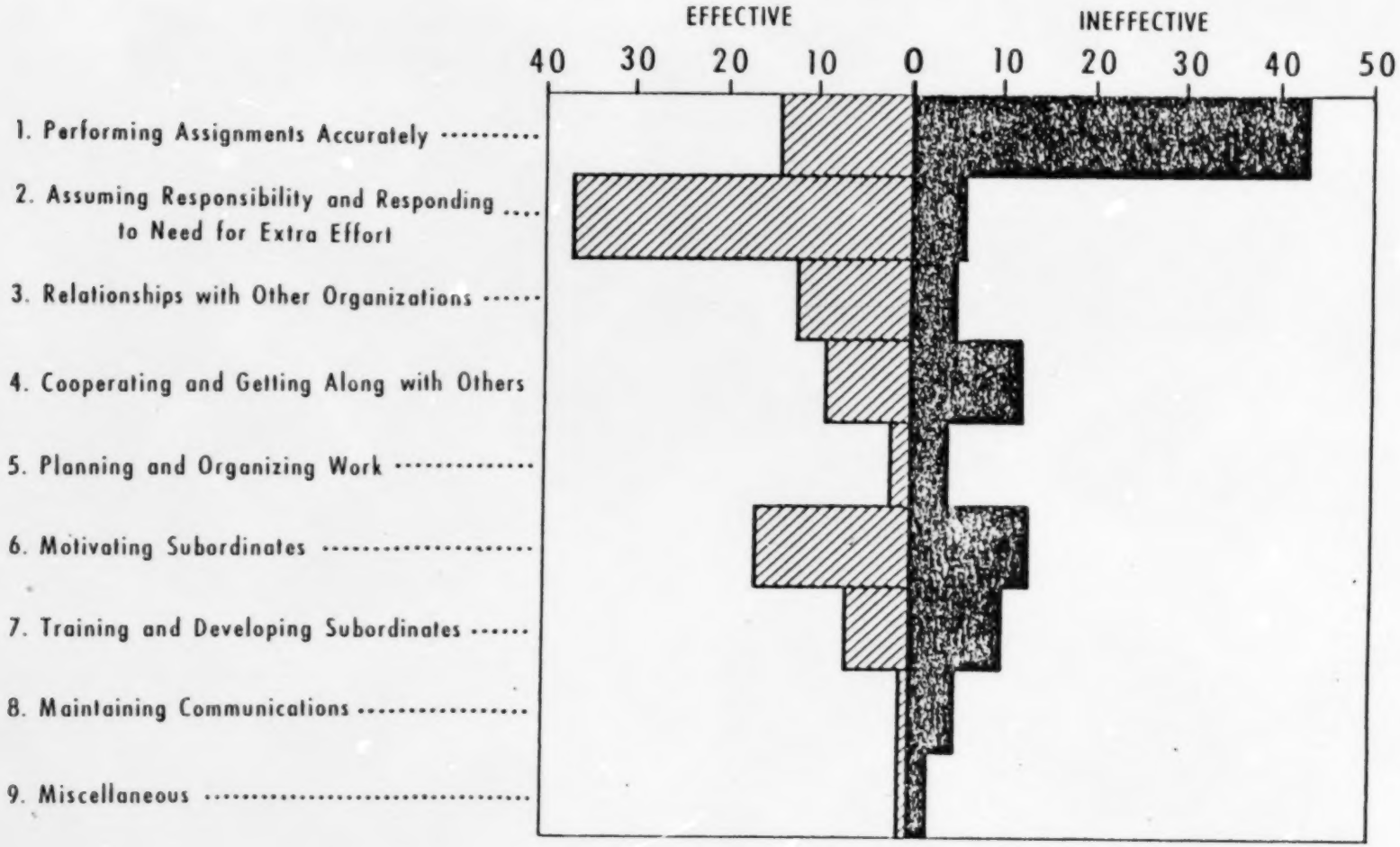
Taking the pulse of the organization

What are the areas of particular strength or weakness in the functioning of the organization as a whole? Consider Exhibit 2. Exhibit 2 is based upon a sample of about 2100 incidents drawn from the pool of 5000. We see that relatively high concentrations of both effective and ineffective incidents occur in the areas of "Performing Assignments Accurately" and "Assuming Responsibility and Responding to Need for Extra Effort." However, "Performing Assignments Accurately", shows a higher concentration of ineffective than effective incidents, while the reverse is true of "Assuming Responsibility and Responding to Need for Extra Effort". The area of "Motivating Subordinates" also has a high concentration of effective and ineffective incidents. On the other hand, relatively few incidents of either type occur in areas of "Planning and Organizing Work" and "Maintaining Communications".

The significance for management of a tabulation like this is obvious. It pinpoints the areas where further analysis might be profitable. Take just one example. A comparison of the distribution of critical incidents with present statements of job requirements can show whether or not the latter need to be revised.

EXHIBIT 2

PERCENT OF EFFECTIVE AND INEFFECTIVE INCIDENTS FOR COMBINED SERIES FOR EACH PERFORMANCE AREA


EFFECTIVE
INEFFECTIVE
40 30 20 10 0 10 20 30 40 50
1. Performing Assignments Accurately
2. Assuming Responsibility and Responding to Need for Extra Effort
3. Relationships with Other Organizations
4. Cooperating and Getting Along with Others
5. Planning and Organizing Work
6. Motivating Subordinates
7. Training and Developing Subordinates
8. Maintaining Communications
9. Miscellaneous

Making promotion decisions

How do the critical requirements of the job change with grade level? Exhibit 3 shows the proportions of incidents at different grade levels for each performance area. At the lower levels, the greatest proportions of incidents involve "Performing Tasks Accurately," and "Assuming Responsibility and Responding to Need for Extra Effort". At the higher levels, "Motivating Subordinates", "Training and Developing Subordinates", and "Maintaining Communications" account for the greatest proportion of incidents. No surprise here. Nevertheless, an analysis of critical incidents can help to define the content and changes in work that occur at these different levels, thus providing management with more specific information than might otherwise be available.

When incidents are classified and tabulated as in Exhibit 3, it quickly appears that the supervisor may not have the opportunity to observe behaviors at one level that are indicative of how well the employee will perform at a higher level, because there may be little or no opportunity for these kinds of incidents to occur. As Exhibit 3 clearly shows, "Planning and Supervising" incidents, which preponderate at the higher grade levels occur very infrequently at the lower levels. Hence, in making a selection for a supervisory job, a promotion board might wish to supplement performance information with other data - for example, tests - to get a better prediction of how well a person might be expected to function as a supervisor.

Planning job rotation

A job rotation plan can be developed by classifying the incidents according to functional areas. This would enable participants in the plan to gain experience in certain kinds of problem situations that would enhance their performance later in their careers.

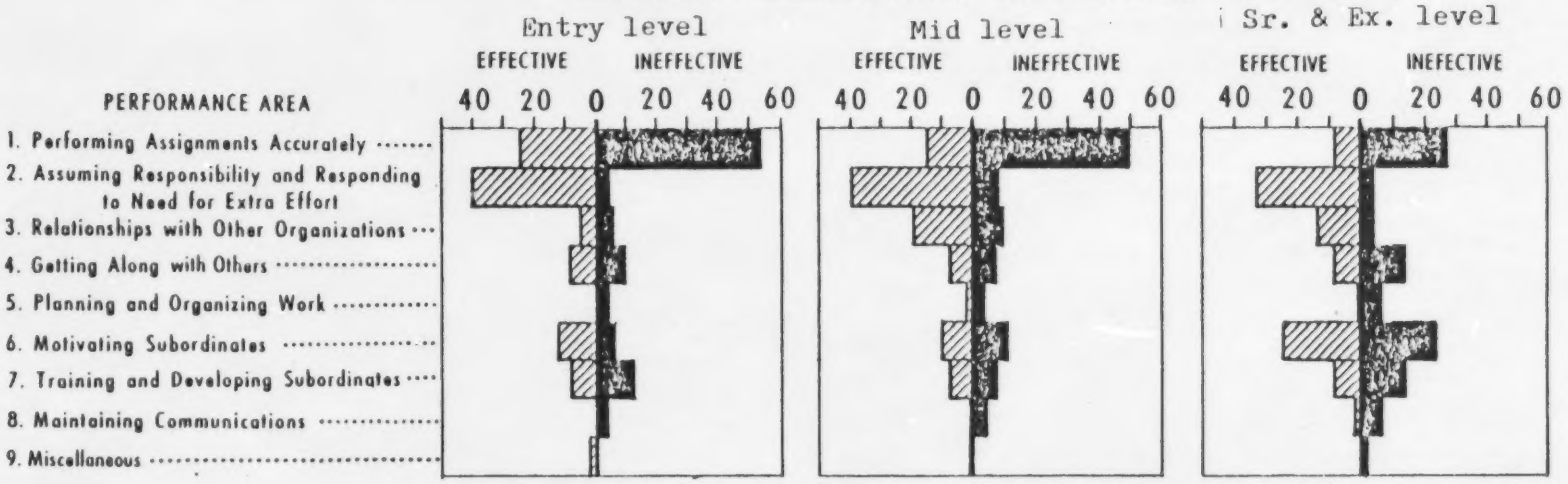
Spotting training needs

Just as an individual employee's performance record can be used to diagnose his specific training needs, so too can a pool of critical incidents collected from many employees point up training needs of the group as a whole. This is particularly true when the incidents are classified according to function or program areas. Inspection of the incidents may suggest curriculum content, as for example, certain supervisory practices that need to be emphasized or re-emphasized. Indeed the incidents themselves might be incorporated as study material in a supervisory training program.

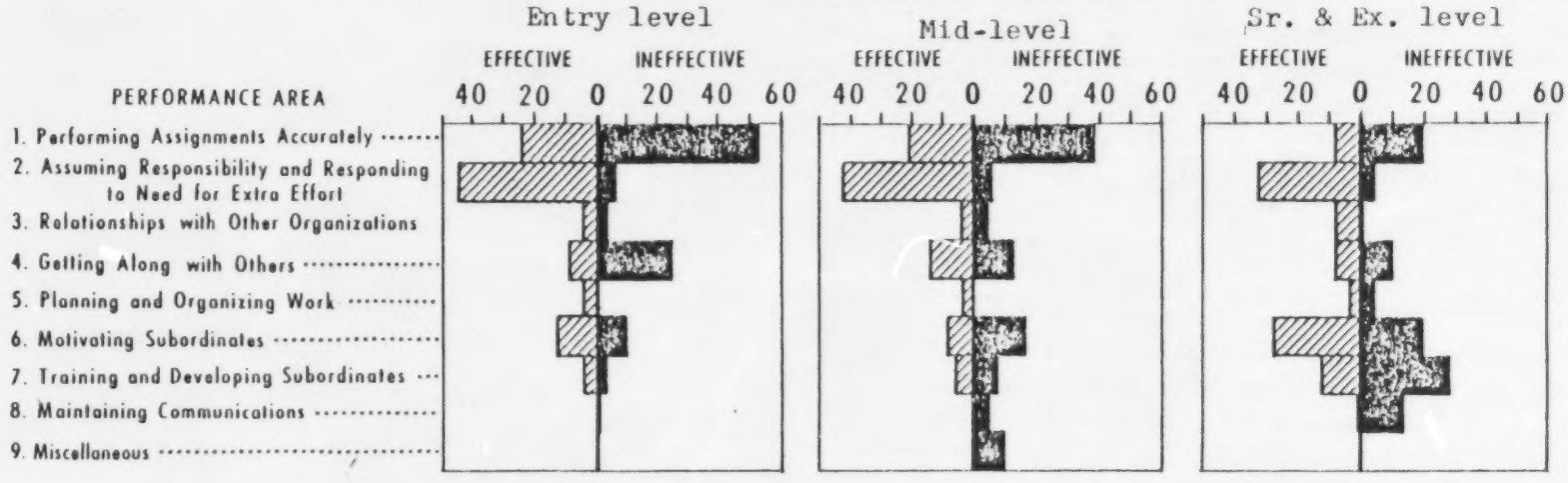
EXHIBIT 3

PERCENT OF EFFECTIVE AND INEFFECTIVE INCIDENTS WITHIN EACH LEVEL AND SERIES FOR EACH PERFORMANCE AREA

ACCOUNTING ADMINISTRATION AND ACCOUNTING (501+510)



BUDGET ADMINISTRATION (560)



Determining relevance of training

Critical incidents can also be used to assess and validate existing curriculum content by checking them as to whether the relevant skills are "Taught" or "Not Taught" in the course.

Evaluating program changes

Still another potential use for critical incidents is the evaluation of program and policy changes. Suppose that a certain organizational or procedural change is introduced in order to alleviate some problem situation. Incidents collected after the change has been introduced can be compared with those in the present incident pool, and a statement as to the effects of the change then can be made.

CONCLUSION

It should be evident by now that critical incidents can tell management many things that it needs to know. The information derivable from an analysis of critical incidents is less influenced by subjectivity and bias, because it is based upon actually observed job performance. At the same time, it is more precise, more specific, and more relevant to the requirements of the job than information obtained by more traditional methods.

FORCE FIELD ANALYSIS

In the application of Force Field Analysis, Lewin, assumes that in any situation there are both driving and restraining forces which influence any change that may occur.

A manager is often in a position where he/she must consider not only output but also short term and long term goals. The framework that is useful in diagnosing the interrelationships is available through force field analysis. When using,FFA, it is necessary to consider Likert's intervening/causal variables. During the course of analysis you will also identify and catalog some nuetral forces.

Definitions

- Driving Forces-(Positive) "pushing" in a particular direction tending to start a change and keep it going. In terms of effiency of a workgroup here are some positive forces; Pressure from the supervisor, incentive pay and competition.

- Restraining Forces-(Negative) "pushing" in a direction that will tend to decrease the positive forces some examples are; Apathy, hostility, lack of appropriate materials, or poor maintanence of equipment.

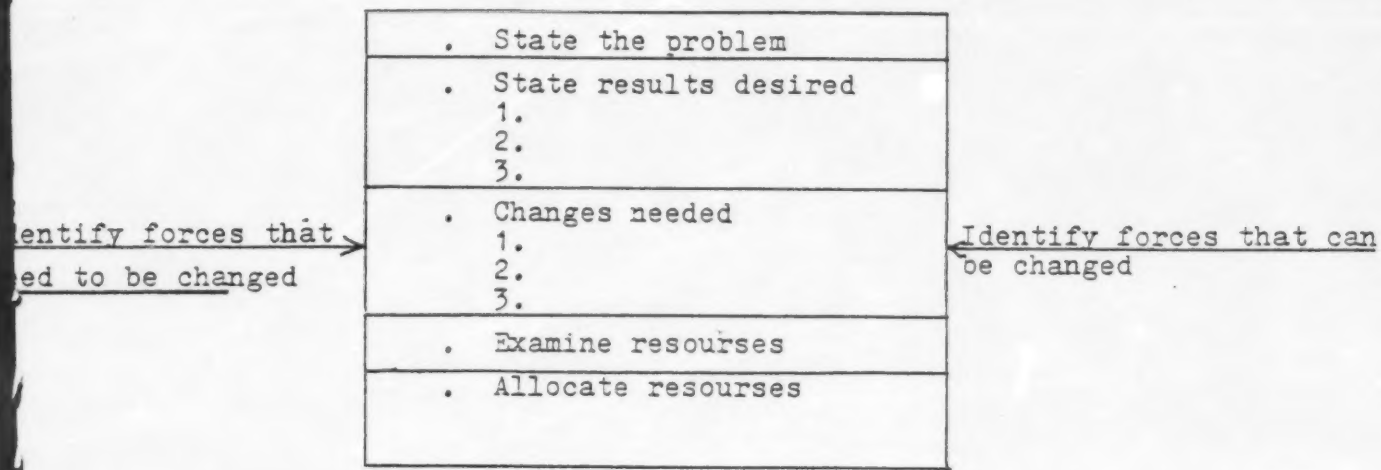
- Equilibrium- (Present state of the organization, i.e., profit, services provided,level of quality etc.). The present level is reached when the positive and negative forces are equal. The desired changes can be made (higher/lower) varying the relationship between the positive and negative forces. Sometimes the desired results can be achieved by simply ignoring some of the forces that are work.

- Intervening Variables-Current condition of the internal state of the organization and reflected in skills, loyality, committment to objectives,motivations, communications,decision making, etc.
- Causal Variables- Skilled people, technical excellence, necessary controls, ample training, employee motivation, organization culture acceptance of role and function by line, department and to management

- Neutral Forces- Forces that surround the work enviornment that have no impact on any of the activity, but are sometimes mistaken as having positive or negative force and are introduced as such

FORCE FIELD ANALYSIS

The chart shown below is a practical application model showing the process that supervisors could use when applying FFA to effect change in their workforce or to implement or modify a program.



SMALL GROUP WORK SESSIONS

A number of "break-out" sessions were included in the Workshop (see agenda in Final Report) to provide for an opportunity to engage in group problem solving, discussion between the schools, and development of recommendations for post-workshop activities. As it eventuated, all of the small group sessions concentrated on problems and concerns related to financial management. Indeed, an additional voluntary work session was added at the end of scheduled sessions at the behest of the participants to deal with these matters, particularly the recommendations of the small group sessions. The specific small group recommendations to the Workshop are outline below:

- That the Podiatry and Optometry Associations separately prepare a quarterly report to be shared between the schools within each association. These reports would be shared between associations with the idea of, possibly in the future, developing a report common to both groups.

- Possible formation of a joint committee to work out a formula for reporting comparable financial data.

- Schools should make use of financial analysis in compiling reports; for the schools as a whole, the reports should allow the individual institutions to spot their shortcomings.

- Chief administrators should gather together and discuss financial problems that plaque their institutions.

- Chief fiscal officers should gather together and discuss financial problems.

- The group recommends that their respective educational associations seek to establish a common reporting system. (This relates specifically to the annual financial report submitted to the educational association).

- The group recommends that the business officers of the participating institutions shall meet annually.

- The educational institutions within Podiatry and within Optometry should develop a standard account classification format that permits the use of industry-wide financial analysis standards including ratios determined to be applicable to each profession.

- The educational institution associations and/or accrediting agencies related to Podiatry and Optometry should collect constituent institional financial data in a manner so standardized to allow industry wide utilization in financial analysis.

- Each educational institution should develop a plan that deals with the question of depreciation acknowledging alternatives for arriving at costs and means of budget-planning against these costs.

- The Functional Value Analysis (FVA) concept should be utilized as a management tool in the assessment of real costs of various cost-control centers; in the comparative analysis of identifying various operational alternatives; and as a means of communicating an understanding of costs to faculty.

- The Association of Schools and College of Optometry (ASCO) and the American Association of Colleges of Podiatric Medicine (AACPM) should initiate contact with the National Association of College and University Business Officers (NACUBO) for the purpose of developing accounting standards for these professions.

- The Optometric and Podiatric educational institutions, individually and collectively, (including appropriate sub-groupings), should compute key financial ratios for the past five years as a means of analyzing financial trends that seem evident within these particular educational industries and that this practice should be continued on at least an annual basis for historical and trend analysis.

- The Bureau of Health Manpower, DHEW, should consider assisting the educational institution associations in Optometry and Podiatry in the implementation of relevant recommendations from the "Management Workshop for Institutional Administrators in Optometric and Podiatric Education" as, for example, the development of a standard account classification format for the establishment of industry standards.

As a result of the final work session, many of the above recommendations are in the process of implementation within the respective Associations. Task groups of business officers have been formed, and will meet concurrent with the regular board meetings of the Associations. It is hoped that certain common accounting definitions and reporting procedures will have been developed within a year's time.